# U.S. ARMY CORPS OF ENGINEERS CIVIL WORKS PROGRAM

# CONGRESSIONAL SUBMISSION FISCAL YEAR 2003

### **MISSISSIPPI VALLEY DIVISION**

Budgetary information will not be released outside the Department of the Army until 4 February 2002

#### Justification of Estimate for Civil Functions Activities Department of the Army, Fiscal Year 2003

## MISSISSIPPI VALLEY DIVISION Corps of Engineers

#### Table of Contents

	Page No.
Summary	1
Surveys	
Alexander and Pulaski Counties, Illinois	18
Amite River and Tributaries, Bayou Manchac, Louisiana	
Amite River and Tributaries Ecosystem Restoration, Louisiana	23
Atchafalaya River, Bayous Chene, Boeuf and Black, Louisiana	2
Baraboo River, Wisconsin	
Calcasieu Lock, Louisiana	3
Calcasieu River Basin, Louisiana	8
Des Moines and Raccoon Rivers, Iowa	5
Fort Dodge, Iowa	
Gulf Intracoastal Waterway Ecosystem Restoration, Louisiana	
Hurricane Protection, Louisiana	
Illinois River Basin Restoration, Illinois	
Illinois River Ecosystem Restoration, Illinois	20
Louisiana Coastal Area - Ecosystem Restoration, Louisiana	
Lower Des Moines River, Iowa and Missouri	
Minnesota Dam Safety, Minnesota	
Ouachita and Black Rivers, Louisiana and Arkansas	
Pearl River Watershed, Mississippi	15
Plaquemines Parish Urban Flood Control, Louisiana	
Port of Iberia, Louisiana	
Red River of the North Basin, Minnesota, North Dakota, South Dakota, and Manitoba, Canada	27
Rock River, Illinois and Wisconsin	
St. Bernard Parish Urban Flood Control, Louisiana	
St. Charles Parish Urban Flood Control, Louisiana	
St. John the Baptist Parish, Louisiana	
St. Louis Riverfront, Missouri and Illinois	
Upper Mississippi and Illinois River Navigation Study, Illinois, Iowa, Minnesota, Missouri, and Wisconsin	
Upper Mississippi River Comprehensive Plan, Illinois, Iowa, Minnesota, Missouri, and Wisconsin	
Upper Mississippi River System Flow Frequency Study, Illinois, Iowa, Kansas, Missouri, Nebraska, and Wisconsin	
Upper Mississippi River Watershed Management, Lake Itasca to Lock and Dam 2, Minnesota	
White River Basin Comprehensive, Arkansas and Missouri	

### Preconstruction Engineering and Design

Bayou Sorrel Lock, Louisiana	36
Chesterfield, Missouri	44
Davenport, Iowa	38
Jefferson Parish, Louisiana	40
Lafayette Parish, Louisiana	41
Louisiana Coastal Area - Barataria Basin, Barrier Shoreline Restoration, Louisiana	34
Louisiana Coastal Area - Barataria Basin, Marsh Creation and Restoration, Louisiana	35
Orleans Parish, Louisiana	42
Peoria Riverfront Development, Illinois	33
River des Peres, Missouri	
St. Louis Flood Protection, Missouri	46
St. Louis Harbor, Missouri and Illinois	37
West Shore Lake Pontchartrain, Louisiana	43
Wood River Levee Illinois	30

#### Justification of Estimate for Civil Functions Activities Department of the Army, Fiscal Year 2003

## MISSISSIPPI VALLEY DIVISION Corps of Engineers

#### Table of Contents

	Page No.
Construction, General	
Chain of Rocks Canal, Mississippi River, Illinois (Deficiency Correction)	
Comite River, Louisiana	
Crookston, Minnesota	171
East St. Louis, Illinois	112
Grand Forks, North Dakota - East Grand Forks, Minnesota	187
Homme Lake, North Dakota (Dam Safety)	205
Inner Harbor Navigation Canal Lock, Louisiana	
J. Bennett Johnston Waterway Mississippi River to Shreveport, Louisiana	85
LaFarge Lake and Channel Improvement, Wisconsin 1962 Act	
Lake Pontchartrain and Vicinity, Louisiana (Hurricane Protection)	
Larose to Golden Meadow, Louisiana (Hurricane Protection)	
Lock and Dam 11, Mississippi River, Iowa (Major Rehabilitation)	
Lock and Dam 12, Mississippi River, Iowa (Major Rehabilitation)	
Lock and Dam 24, Mississippi River, Illinois and Missouri (Major Rehabilitation)	
Lock and Dam 3, Mississippi River, Minnesota (Major Rehabilitation)	
Loves Park, Illinois	
Melvin Price Lock and Dam, Illinois and Missouri	
Meramec River Basin, Valley Park Levee, Missouri	176
Mississippi River Between the Ohio and the Missouri Rivers (Regulating Works), Missouri and Illinois	
Mississippi River Ship Channel, Gulf to Baton Rouge, Louisiana	
New Orleans to Venice, Louisiana (Hurricane Protection)	
Sheyenne River, North Dakota	
Southeast Louisiana, Louisiana	
Ste. Genevieve, Missouri	
Upper Mississippi River System Environmental Management Program, Illinois, Iowa, Minnesota, Missouri and Wisconsin	209
West Bank Vicinity of New Orleans, Louisiana	
Operation and Maintenance	
Locks and Dams 3, 5A, 6, 7, 8, and 9, Mississippi River, Minnesota, Wisconsin and Jowa (Major Rehabilitation)	

#### Justification of Estimate for Civil Functions Activities Department of the Army, Fiscal Year 2003

### MISSISSIPPI RIVER COMMISSION Corps of Engineers

#### Table of Contents

	Page No.
FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES	
Summary	261
Surveys	000
Alexandria, Louisiana	
Coldwater below Arkabutla Lake, Mississippi	
Collection and Study of Basic Data	
Donaldsonville, Louisiana	
Germantown, Tennessee	
Millington, Tennessee	
Spring Bayou, Louisiana	267
Preconstruction Engineering and Design	
Morganza, Louisiana, to the Gulf of Mexico	
Wolf River, Memphis, Tennessee	271
Construction	
Mississippi River Levees, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee	
Channel Improvement, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee	286
Atchafalaya Basin, Louisiana	300
Atchafalaya Basin Floodway System, Louisiana	309
Francis Bland Floodway Ditch, Arkansas	317
Helena, Arkansas	322
Horn Lake Creek and Tributaries, Including Cow Pen Creek, Tennessee and Mississippi	380
Louisiana State Penitentiary Levee, Louisiana	
Mississippi Delta Region, Louisiana	339
Mississippi-Louisiana Estuarine Areas, Mississippi and Louisiana	346
Nonconnah Creek, Tennessee	386
St. Francis Basin, Arkansas and Missouri	
St. Johns Bayou - New Madrid, Missouri	
West Tennessee Tributaries, Tennessee	
Yazoo Basin, Mississippi	
Maintenance	

#### Justification of Estimates for Civil Works Activities Department of the Army, Corps of Engineers Fiscal Year 2003

#### SUMMARY MISSISSIPPI VALLEY DIVISION

	FY 2002 Allocation	FY 2003 <u>Request</u>	Increase <u>or Decrease</u>
General Investigations			
Survey	\$ 12,015,000	\$10,379,000	\$ - 1,636,000
Preconstruction Engineering and Design	3,379,000	1,751,000	- 1,628,000
Subtotal, General Investigations	\$ 15,394,000	\$ 12,130,000	\$ - 3,264,000
Construction, General			
Construction	\$217,375,000	<u>1</u> / \$138,341,000	<u>2</u> / \$ - 79,034,000
Operation and Maintenance, General			
Project Operation	126,194,000	146,679,000	20,485,000
Project Maintenance	234,811,000	207,996,000	- 26,815,000
Subtotal, Operation and Maintenance, General	361,005,000	<u>3</u> / 354,675,000	- 6,330,000
GRAND TOTAL, MISSISSIPPI VALLEY DIVISION	\$593,774,000	\$505,146,000	\$ -88,628,000

<sup>1/</sup> Includes \$11,444,000 allocated from the Inland Waterways Trust Fund.

<sup>2/</sup> Includes \$16,331,000 allocated from the Inland Waterways Trust Fund.

<sup>3/</sup> Includes funds from the Supplemental Appropriations Bill, FY 2001.

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2002	FY 2002	FY 2003	After FY 2003
•	\$	\$	\$	\$	\$

- 1. SURVEYS NEW: None.
- 2. SURVEYS CONTINUING:
  - a. Navigation Studies: The amount of \$435,000 is requested to continue three feasibility studies in Fiscal Year 2003.

#### LOUISIANA

Atchafalaya River and Bayous Chene, 1,697,000 196,000 189,000 100,000 1,212,000 Boeuf and Black, LA

New Orleans District

The Atchafalaya River and Bayous Chene, Boeuf, and Black are located in Assumption, Iberville, and St. Mary Parishes in south-central Louisiana in the vicinity of Morgan City, Louisiana. The existing Atchafalaya River and Bayous Chene, Boeuf, and Black, Louisiana, navigation project provides a 20- by 400- foot access channel between the Gulf of Mexico and oil and gas rig fabrication yards and offshore oil and gas service facilities located west of Morgan City and, incidentally, to facitilies located on the Atchafalaya River in the Morgan City-Berwick area. The existing channel has a problem with fluff, a flocculant clay material that flows into the Atchafalaya Bar Channel immediately after maintenance dredging. Local interests request that the existing channel be enlarged to a project depth of 35 feet, including allowances for the effects of fluff. The study would address the feasibility of providing deeper access channels to facilities along the Atchafalaya River and Bayous Chene, Boeuf, and Black. The study purpose is commercial navigation, which is in accord with Administration policy. The local sponsor is the Morgan City Harbor and Terminal District. In a meeting on 14 February 2001, the Commission expressed its intent to cost-share in subsequent phases of the proposed project.

Fiscal Year 2002 funds are being used to continue into the feasibility phase of the study. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

\$3,197,000
197,000
1,500,000
1,500,000

The reconnaissance phase is scheduled for completion in February 2002. The feasibility study is scheduled for completion in September 2011.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Calcasieu Lock, LA New Orleans District	3,190,000	792,000	315,000	150,000	1,933,000

Calcasieu Lock is a feature of the Gulf Intracoastal Waterway between Apalachee Bay, Florida, and the Mexican Border (Gulf Intracoastal Waterway) Project. The lock is located east of the Calcasieu River, approximately 10 miles south of Lake Charles, Louisiana, in Calcasieu Parish. The lock prevents saltwater intrusion from the Gulf of Mexico via the Calcasieu River into the Mermentau River Basin, a major rice producing area. Calcasieu Lock, which was completed in 1950, has dimensions of 13 by 75 by 1,206 feet and is structurally sound. It is becoming congested due to increasing traffic. Studies of the Gulf Intracoastal Waterway system conducted in 1992 determined that there is an immediate need for capacity increases at Bayou Sorrel and Calcasieu Locks. Feasibility studies of Bayou Sorrel Lock are underway in the Intracoastal Waterway Locks, Louisiana, study. Movements through Calcasieu Lock totaled 39.5 million tons in 1999; delays at the lock averaged 2.2 hours per tow and are projected to increase.

Fiscal Year 2002 funds will be used to continue the feasibility phase of the study.

The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$3,100,000. Calcasieu Lock is a feature of the Gulf Intracoastal Waterway, which is listed in Section 206 of Public Law 95-502 as an inland waterway; therefore, the feasibility study is at full Federal expense.

The feasibility study is scheduled for completion in September 2013.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Port of Iberia, LA New Orleans District	2,080,000	0	315,000	185,000	1,580,000

The Port of Iberia is located at the inland terminus of the Commercial Canal in Iberia Parish in south-central Louisiana. There are a number of oil and gas rig fabrication yards and offshore oil and gas supply facilities located in the Port of Iberia. The Commercial Canal is 12 feet deep and 150 feet wide and extends from the Port of Iberia near New Iberia, Louisiana, to the Gulf Intracoastal Waterway. Vessel traffic can then cross Vermilion Bay via the 9- by 150-foot Acadiana Navigation Channel through Southwest Pass to the Gulf of Mexico, or follow the Gulf Intracoastal Waterway, which is 12 feet deep and 125 feet wide, and Freshwater Bayou and the 84-foot wide Freshwater Bayou Lock to access the gulf. Oversize loads, such as offshore rig components must move to the gulf via the Freshwater Lock By-Pass, a 125 foot wide lock structure constructed by local interests in 1985, which is operated by alternatively floating and sinking barges. A single operation of the by-pass can cost over \$300,000. Vessels with drafts less than 9 feet cross the Vermilion Bay to the gulf, which reduces the transportation cost significantly relative to the alternate route via the Gulf Intracoastal Waterway. The purpose of the study is to address the Federal interest in investigating the feasibility of providing a deeper and wider access channel to the Port of Iberia through enlargement of the existing access channels. In FY 2001, \$20,000 of O&M, Section 216, Review of Completed Projects, funds were made available to initiate the reconnaissance study. The potential sponsor, the Port of Iberia, contracted for an independent analysis for the channel enlargement required for the Port. The District is reviewing that analysis to attempt to use it as the basis for the Reconnaissance Report.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase, and if the report is certified to be in accord with policy, continue into the feasibility phase. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is \$4,000,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of cost sharing is as follows:

Total Estimated Study Cost	\$4,080,000	
Reconnaissance Phase (Federal)	80,000	1
Feasibility Phase (Federal)	2,000,000	
Feasibility Phase (Non-Federal)	2,000,000	

The reconnaissance phase is scheduled for completion in April 2002. The feasibility study is scheduled for completion in September 2013.

Total Mavigation Studios	6.967.000	988.000	819.000	435,000	4.725.000
Total - Navigation Studies	0,907,000	988,000	8 19,000	435,000	4,725,000

<sup>&</sup>lt;sup>1</sup> The reconnaissance study cost of \$80,000 in General Investigations funds excludes \$20,000 in O&M, Section 216, Review of Completed Projects, funds.

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2002	FY 2002	FY 2003	After FY 2003
•	\$	\$	\$	\$	\$

b. Flood Damage Prevention Studies: The amount of \$1,365,000 is requested to continue ten and complete one feasibility study in Fiscal Year 2003.

**IOWA** 

Des Moines and 1,485,000 920,000 158,000 51,000 356,000 Raccoon Rivers, IA Rock Island District

The City of Des Moines, located in Polk County, lowa, has several rivers and waterways that traverse the urban and fringe areas including the Des Moines River, Raccoon River, and numerous small tributaries. These areas continually sustain flood damages. During the 1993 flood, Polk County suffered more than \$152,000,000 in flood damages. In addition, the county was without water and sewer for approximately a week causing the closure of most of the businesses and industry in the county. More than 3,000 properties were inundated. The City of Des Moines has had a long-standing cooperative relationship with the Corps of Engineers culminating with the recent completion of the Valley Gardens levee system and near completion of the Walnut Creek/Raccoon River levee system. However, evaluation of the city's entire flood damage prevention system identified a number of areas deemed to be deficient. Continuing flooding and bank erosion on the Des Moines River and Raccoon River have produced strong local support for additions to, or modifications of, the flood damage prevention and water resources projects within the City of Des Moines. The feasibility study would develop and evaluate alternative plans and recommend a plan to address the identified problems and opportunities. The Feasibility Cost Sharing Agreement was executed with the City of Des Moines in September 1999.

Fiscal Year 2002 funds are being used to continue the feasibility phase. Funds requested in Fiscal Year 2003 will be used to continue the feasibility phase. The estimated cost of the feasibility phase is \$2,770,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,870,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,385,000
Feasibility Phase (Non-Federal)	1,385,000

The reconnaissance phase was completed in September 1999. The feasibility study is scheduled for completion in January 2006.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Lower Des Moines River, IA & MO Rock Island District	965,000	0	63,000	89,000	813,000

The Lower Des Moines River study area is the reach of the river from Saylorville Reservoir to its confluence with the Mississippi River at Keokuk, Iowa. This approximately 300 miles of river lies adjacent to or flows through ten counties in Iowa and one county in Missouri. The Lower Des Moines River has had a long history of flooding problems. In part, these problems led to the construction of Saylorville and Red Rock Reservoirs in the 1960's and 1970's. The Des Moines River basin is one of the most intensively used watersheds in the nation. Farming practices, land use changes and urban flood plain use is impacting the Lower Des Moines River and its flood plain. Impacts include increased erosion, sedimentation, and flooding, and degraded water quality and aquatic and terrestrial habitats. Bank erosion and channel migration throughout the Lower Des Moines River valley is resulting in the significant loss of farmland, multiple threats to public infrastructure, economic hardship and environmental impacts. The study and its anticipated outputs of environmental restoration, flood damage reduction, water quality, erosion reduction, and recreation are in accord with Administration policy.

Fiscal Year 2002 funds are being used to initiate the reconnaissance phase at full Federal expense. Funds requested in Fiscal Year 2003 will be used to complete the reconnaissance phase, and if the report is certified to be in accord with policy, continue into the feasibility phase. The preliminary estimated cost of the feasibility phase is \$1,730,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,830,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	865,000
Feasibility Phase (Non-Federal)	865,000

The reconnaissance phase is scheduled for completion in December 2002. The feasibility study is scheduled for completion in September 2006.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
LOUISIANA					
Amite River and Tributaries, Bayou Manchac, LA New Orleans District	2,033,000	33,000	25,000	100,000	1,875,000

The study area is located in southeastern Louisiana and includes Iberville, East Baton Rouge, and Ascension Parishes. The three parishes were included in the Amite River and Tributaries reconnaissance report completed in November 1984. The study will investigate methods to provide flood damage reduction and ecosystem restoration benefits for the Bayou Manchac/Spanish Lake watershed. Flood control improvements are needed to reduce flood damages to residential and commercial development, which is consistent with Administration policy. The Corps and the Pontchartrain Levee District, the non-Federal sponsor, entered into a feasibility cost sharing agreement on November 29, 2001.

Fiscal Year 2002 funds are being used to initiate the feasibility phase of the study. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,033,000
Reconnaissance Phase (Federal)	33,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The Amite River and Tributaries reconnaissance study was completed in 1984. The feasibility study is scheduled for completion in September 2013.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Calcasieu River Basin, LA New Orleans District	2,660,000	130,000	189,000	150,000	2,191,000

The study area is located in southwestern Louisiana and includes Vernon, Rapides, Beauregard, Allen, Calcasieu, Jefferson Davis, and Cameron Parishes. Development in the study area is subject to repetitive flooding particularly in the Lake Charles area in the southern portion of the Calcasieu Basin. Headwater flooding and backwater flooding from the Calcasieu River is a major problem in the Lake Charles area and in the Bayou Choupique area west of Sulphur, Louisiana. Fish and wildlife habitat has been lost to development in the upper basin and to erosion, subsidence, saltwater intrusion, and development in the estuarine areas of the lower basin. The study will address the feasibility of measures to reduce flooding and restore fish and wildlife habitat in the study area. The Louisiana Department of Transportation and Development, the City of Lake Charles, the Calcasieu Parish Jury, and the Calcasieu Parish Gravity Drainage District No. 4 are the potential sponsors for the study. The anticipated outputs of flood damage prevention and environmental restoration are in accord with Administration policy.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase and, if the report is certified to be in accord with policy, continue into the feasibility phase of the study. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$5,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$5,160,000
Reconnaissance Phase (Federal)	160,000
Feasibility Phase (Federal)	2,500,000
Feasibility Phase (Non-Federal)	2,500,000

The reconnaissance phase is scheduled for completion in March 2002. The feasibility study is scheduled for completion in September 2013.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Hurricane Protection, LA New Orleans District	4,500,000	75,000	425,000	125,000	3,875,000

The study encompasses a multi-parish area in southeastern Louisiana. Hurricanes pose a significant threat to highly populated and industrial areas in this part of the state. The study will review the currently authorized hurricane protection projects and determine if modifications are required to provide a higher level of protection. State and local governments have expressed concern that the current hurricane protection measures do not provide protection for category 4 or 5 storms. The current projects provide protection for the equivalent of a fast-moving category 3 storm or less. If a stronger storm impacts the coastal area, extreme damages and loss of life can be anticipated. The State of Louisiana supports the study and would be expected to cost share in the feasibility study. Areas to be studied will include raising the current levee systems, construction of barriers that may prevent storm surge from reaching the protected areas, restoring/maintaining barrier islands, maintaining shorelines and land bridges to prevent storm surges from moving inland, and wetlands construction and restoration that could lower storm surge elevations. The economic damage and loss of life caused by a category 4 or 5 storm would be extreme and justifies proceeding with the study in the budget year. The study and its outputs are in accord with Administrative policy. The reconnaissance phase is scheduled to be completed in July 2002, which is 18 months after initiating the study.

Fiscal Year 2002 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2003 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$8,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$8,500,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	4,000,000
Feasibility Phase (Non-Federal)	4,000,000

The reconnaissance phase is scheduled for completion in July 2002. The feasibility study is scheduled for completion in September 2013.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Ouachita and Black Rivers, LA and AR Vicksburg District	100,000	0	63,000	37,000	0

The study area includes the Ouachita and Black Rivers in Arkansas and Louisiana between mile 0 on the Black River, Louisiana, and mile 460 on the Ouachita River, Arkansas, at the outlet of Remmel Dam. Critical erosion problems occur along the Ouachita and Black Rivers that threaten to cause flooding and impede navigation. This erosion endangers levees, cities, historic sites, and other properties. This problem causes considerable burden and adverse impact in local economy for the municipalities, counties, parishes, levee districts, and navigation interests.

Fiscal Year 2002 funds are being used to initiate a reconnaissance study to assess bank caving problems. Fiscal Year 2003 funds will be used to complete the reconnaissance study and prepare an evaluation report. The potential sponsors for this project are the Tensas River Levee District in Louisiana and the Ouachita River Commission in Arkansas. The reconnaissance phase is scheduled to be completed in January 2003, which is 12 months after initiating the study. The authority to conduct this reconnaissance study is the Ouachita River Basin Comprehensive Study authorized by a resolution of the Senate Committee on Public Works adopted 5 October 1972.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Plaquemines Parish Urban Flood Control, LA New Orleans District	1,569,000	96,000	189,000	100,000	1,184,000

Plaquemines Parish is located along both banks of the Mississippi River from New Orleans, Louisiana, to the river's mouth, a distance of about 80 miles. The July 1999 population of the parish was about 25,700. All of the development in the parish is located along the alluvial ridges of the Mississippi River and is protected from river flooding by the Mississippi River Levees feature of the Mississippi River and Tributaries Project. The rapidly growing New Orleans suburb of Belle Chasse and the Alvin Callender Naval Air Station are located in the northern end of the parish contiguous to New Orleans. Other communities include Braithwaite and Pointe a la Hache on the east bank of the river and Buras, Port Sulphur and Venice on the west bank. The Westwego to Harvey Canal Hurricane Protection Project, which is under construction, will provide hurricane protection to the Belle Chasse area and the Alvin Callender Naval Air Station. The New Orleans to Venice Hurricane Protection Project, which is nearing completion, provides hurricane protection to the more developed areas in the southern reaches of the parish. Flooding in developed areas in the parish, particularly the rapidly developing Belle Chasse area, is increasing. Flood control improvements are needed to reduce flood damages to residential development, which is consistent with Administration policy. Plaquemines Parish Government has requested a Federal project to address rainfall flooding problems in the area and has expressed its intent to cost share the feasibility phase of the study.

Fiscal Year 2002 funds are being used to continue into the feasibility phase of the study. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$2,946,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	\$3,042,000
Reconnaissance Phase (Federal)	96,000
Feasibility Phase (Federal)	1,473,000
Feasibility Phase (Non-Federal)	1,473,000

The reconnaissance phase was completed in November 2001. The feasibility study is scheduled for completion in September 2010.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
St. Bernard Parish Urban Flood Control, LA New Orleans District	1,703,000	335,000	252,000	150,000	966,000

St. Bernard Parish is located on the east bank of the Mississippi River south of, and contiguous to, the City of New Orleans, Louisiana. The July 1998 Census Bureau estimated population of the parish was approximately 66,100. The area is protected from Mississippi River and hurricane flooding by a levee loop called the Chalmette area loop that is formed by the west bank river levee and the Chalmette area feature of the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection project. Most of the parish's population lives within a smaller, internal levee loop adjacent to the Mississippi River formed by the river levee and local levee. Major floods caused by heavy rainfall have occurred in 1978, 1980, 1982, 1983, and 1995. Damages during the 1978 flood were approximately \$22,000,000 and St. Bernard Parish was declared a disaster area. Estimated damages for the 1983 flood were \$2,500,000 to 400 homes, and for the 1995 flood, \$5,700,000 to about 700 homes. Flood control improvements are needed to reduce repetitive damages to residential development, which is consistent with Administration policy. The St. Bernard Parish Government and the Lake Borgne Levee District are the cost-sharing sponsors for the feasibility phase. The feasibility cost sharing agreement was signed on 23 February 2001.

Fiscal Year 2002 funds are being used to continue the feasibility phase. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is \$3,200,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	\$3,303,000
Reconnaissance Phase (Federal)	103,000
Feasibility Phase (Federal)	1,600,000
Feasibility Phase (Non-Federal)	1.600.000

The reconnaissance phase was completed on 23 February 2001. The feasibility study is scheduled for completion in September 2008.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
St. Charles Parish Urban Flood Control, LA New Orleans District	2,200,000	75,000	189,000	100,000	1,836,000

St. Charles Parish is located on the east and west banks of the Mississippi River west of, but not contiguous to the city of New Orleans, Louisiana. The July 1998 Census Bureau estimated population of the parish was approximately 48,300. The east bank area is protected from flooding from Mississippi River and hurricane flooding by a levee loop formed by the Mississippi River east bank levee and the under-construction St. Charles Parish feature of the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection project. The west bank area is protected by the Mississippi River west bank levee and, to some extent, by local (non-Federal) hurricane protection levees. Major floods caused by heavy rainfall have occurred in 1978, 1980, 1982, 1983, and 1995. For the 1995 flood, damages totaled \$66,800,000 to about 2,300 homes. Flood control improvements are needed to reduce repetitive damages to residential development, which is consistent with Administration policy. By letter of October 25, 1999, the St. Charles Parish Council stated its intent to act as the cost sharing sponsor for the feasibility phase.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase, and if the report is certified to be in accord with policy, continue into the feasibility phase. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$4,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,300,000
Reconnaissance Phase (Federal)	100,00
Feasibility Phase (Federal)	2,100,000
Feasibility Phase (Non-Federal)	2,100,000

The reconnaissance phase is scheduled for completion in March 2002. The feasibility study is scheduled for completion in September 2013.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
St. John the Baptist Parish, LA New Orleans District	1,600,000	0	100,000	100,000	1,400,000

St. John the Baptist Parish is located along both banks of the Mississippi River about 20 miles west of New Orleans, Louisiana. The July 1999 population of the parish was about 42,000. All of the development in the parish is located along the alluvial ridges of the Mississippi River and is protected from river flooding by the Mississippi River Levees feature of the Mississippi River and Tributaries Project. Hurricane protection and rainfall flooding problems for the west bank of the parish are being addressed in the ongoing Donaldsonville to the Gulf study. Hurricane protection for the east bank area is being addressed in the ongoing Lake Pontchartrain, West Shore study. Residual flooding from rainfall is another problem in the area. Rainfall runoff on the east bank, particularly in the Laplace area, is increasing due to rapid development. Significant rainfall flooding occurred in the east bank of the parish in 1983 and 1995. The potential non-Federal sponsor, the St. John the Baptist Parish Police Jury, has requested a Federal project to address rainfall flooding problems in the study area. The primary purpose of the study is flood damage prevention, which is consistent with Administration policy.

Fiscal Year 2002 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2003 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase is scheduled to be completed in January 2003, which is 12 months after initiating the study. The feasibility study is scheduled for completion in September 2013.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
MISSISSIPPI					
Pearl River Watershed, MS Vicksburg District	4,467,000	1,967,000	0	363,000	2,137,000

The Jackson Metropolitan Area, Mississippi, a primary regional economic center, has major flood problems attributable to the Pearl River, with annual flood damages of approximately \$12,000,000. The flood of record occurred in April 1979 causing an estimated \$300,000,000 in damages. The Pearl River Basin Watershed, Mississippi, feasibility phase was suspended in 1998 due to the sponsor's inability to secure required funding for their cost share of the project. The recommended plan documented in a draft January 1996 report was a comprehensive levee system to provide protection from a flood event of 1979 magnitude. Lack of local support for the recommended plan, questions over operation of the Ross Barnett Reservoir, and downstream concerns over flooding were primary issues. Local interests have proposed a lakes plan along the Pearl River south of the Ross Barnett Reservoir as an alternative to the comprehensive levee plan. The lakes would extend from the Ross Barnett Reservoir outlet downstream along the Pearl River to approximately 1 mile southwest of Interstate 20. In order to create the lakes and adjoining flood-free land for commercial development, the plan proposes performing cut and fill operations on the Pearl River. A preliminary evaluation of the plan indicated that the plan could reduce Pearl River flooding in the Jackson area as would the levee plan. The lakes plan has garnered some local support from community and business leaders due to its commercial development aspects and potential for cost recovery. Meetings were held in September 2001 with potential sponsors, the Pearl River Basin Development District and Rankin-Hinds Pearl River Flood and Drainage Control District, to discuss resumption of flood control studies in Jackson directed toward developing a compromise plan incorporating aspects of both the levee and lakes plans. Such a plan could potentially provide a high degree of flood protection, be economically feasible and environmentally sustainable, and be supported locally. The study is in ac

Funds carried over into Fiscal Year 2002 are being used to prepare a Project Management Plan and Feasibility Cost-Sharing Agreement to resume cost-shared feasibility studies. Funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$8,074,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$8,504,000
Reconnaissance Phase (Federal)	430,000
Feasibility Phase (Federal)	4,037,000
Feasibility Phase (Non-Federal)	4.037.000

The reconnaissance phase was completed in September 1991. The feasibility study is scheduled for completion September 2008.

Total - Flood Damage Prevention Studies 23,282,000 3,631,000 1,653,000 1,365,000 16,633,000

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2002	FY 2002	FY 2003	After FY 2003
•	\$	\$	\$	\$	\$

- c. Shoreline Protection Studies: None.
- d. Special Studies: The amount of \$685,000 is requested to continue one and complete one feasibility study in Fiscal Year 2003.

#### ILLINOIS

Upper Mississippi River System Flow Frequency Study, IL, IA, KS, MN, MO, NE and WI Rock Island District 8,130,000 6,379,000 756,000 463,000 532,000

The study area includes the Upper Mississippi River and its major tributaries. Water-surface profiles adopted in 1966 were employed until an interagency group the Floodplain Management Task Force (composed of representatives from five states, Federal Emergency Management Agency, U.S. Geological Survey, Soil Conservation Service, and the Corps of Engineers) - adopted revised profiles in 1979. The 1979 profiles were based on updated data and a regional skew instead of the zero skew used in the 1966 profiles. This resulted in profiles about five feet lower in the southern reaches of the Upper Mississippi River when compared to the 1966 profiles. With 15-plus years of additional data and several high-water events over the last 30 years, an update of the profiles is needed. The report entitled *Science for Floodplain Management into the 21<sup>st</sup> Century (Galloway Report)* dated June 1994, recommended that the methodology of determining floodflow frequency on the Upper Mississippi and the Lower Missouri Rivers should be studied. In addition, the original agreement stated that the flood-flow frequencies should be revisited as time and technology progress.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study. Fiscal Year 2003 funds will be used to continue the feasibility phase. The estimated cost of the feasibility phase is \$7,780,000, which is being conducted at full Federal expense.

The initial scope of study was completed in December 1997. The feasibility study is scheduled for completion in March 2005.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
MINNESOTA					
Minnesota Dam Safety, Minnesota St. Paul District	600,000	0	378,000	222,000	0

In the 1930's and early 1940's, the Civilian Conservation Corps, Works Progress Administration and Works Projects Administration constructed hundreds of dams in the State of Minnesota. These dams, numbering approximately 500, range in age between 60 and 70 years old, and are located throughout the State of Minnesota. Oversight for most of these dams falls upon the Minnesota Department of Natural Resources, through the Office of the State Dam Safety Engineer. A few of these dams are owned and operated by individual counties and the National Park Service. A few of these dams may be located on tribal lands. It is unknown if all of the dams constructed with Federal monies through the above programs have been inventoried and are being properly maintained and inspected. These aging dams may pose a threat to the life and safety of individuals and to properties downstream of the dams. The study provides for inventory, inspection and modification/rehabilitation of dams originally constructed by the Civilian Conservation Corps, Works Progress Administration and Works Projects Administration in Minnesota. Section 524 of the Water Resources Development Act of 2000 directs the Secretary of the Army to conduct an inventory and assessment of eligible dams in the State of Minnesota. The Secretary is to provide a report to Congress no later than 2 years after the date of enactment of this Act. The inventory and assessment are being conducted at full Federal expense. If the Secretary determines that a dam presents an imminent and substantial risk to public safety, the Secretary may carry out measures to prevent or mitigate against that risk. The Federal share of the cost of mitigation is 65 percent. The Minnesota Department of Natural Resources is highly supportive of this program, and has indicated that it will be a willing sponsor for the non-Federal share of mitigation costs. Local legislation would authorize the funds needed for the local share. The inventory and assessment phase completion date is scheduled for June 2003, w

Section 524 of the Water Resources Development Act of 2000 authorizes this study.

Total - Special Studies 8,730,000 6,379,000 1,134,000 685,000 532,000

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2002	FY 2002	FY 2003	After FY 2003
•	\$	\$	\$	\$	\$

e. Watershed/Ecosystem Studies: The amount of \$4,495,000 is requested to continue ten and complete one feasibility study in Fiscal Year 2003.

**ILLINOIS** 

Alexander and Pulaski Counties, IL 1,712,000 1,483,000 82,000 147,000 0 St. Louis District

The study area, approximately 740 square miles, is located in portions of the southernmost Illinois counties of Alexander, Pulaski, Union, Johnson, Massac, and Pope. For reasons of marginal flood control benefits, changing land use, the recognized environmental uniqueness of the area and changing Corps wetlands restoration policy, the investigation has shifted from its original focus on flood control to its present purpose of habitat restoration. Factors contributing to the area's uniqueness include: trees over 1,000 years old; the presence of both a state refuge (9,000 acre Cache River State Natural Area) and a national refuge (35,000 acre Cypress Creek National Wildlife Refuge); exceptionally large trees including two national records and twelve state champions; numerous endangered species; and two national natural landmarks (Lower Cache River Swamp and Heron Pond-Little Black Slough). The study area is one of six areas in the United States where four or more physiographic regions overlap. Of these, the Cache River is considered by many experts to be the most diverse. Serious habitat degradation has occurred along the Cache River, at least partly caused by prior Corps projects, including the Cache River Levee and the Cache River Diversion projects. Sedimentation from tributary streams is choking Lower Cache River Swamp, and riverbed entrenchment threatens to drain Heron Pond-Little Black Slough. The U.S. Fish and Wildlife Service, Illinois Department of Natural Resources, The Nature Conservancy, and Ducks Unlimited have turned to the Corps of Engineers for environmental engineering solutions to these problems. If environmental engineering solutions are not undertaken, this unique wetland area will be lost within decades. The local sponsor, Illinois Department of Natural Resources, signed the feasibility cost sharing agreement on 2 November 1994. In November 2001, Illinois Department of Natural Resources requested additional surveys for the recommended project plan. This added work has delayed completion of th

Fiscal Year 2002 funds are being used to continue the feasibility phase. The funds requested for Fiscal Year 2003 will be used to complete the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$2,320,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,872,000
Reconnaissance Phase (Federal)	552,000
Feasibility Phase (Federal)	1,160,000
Feasibility Phase (Non-Federal)	1,160,000

The reconnaissance phase was completed in November 1994. The feasibility study is scheduled for completion in July 2003.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Illinois River Basin Restoration, IL Rock Island District	4,000,000	0	1,260,000	1,051,000	1,689,000

The Illinois River Basin Restoration study encompasses the entire Illinois River watershed within the state of Illinois. The purpose of the Illinois River Restoration study includes the development of a comprehensive plan for the Illinois River watershed, evaluation of critical restoration projects, and initiation of long-term resource monitoring. The plan will address habitat, water quality, navigation, and economic opportunities. Components would include: sediment transport; removal and disposal measures; fish and wildlife conservation and rehabilitation measures; land and water resources enhancement; long-term resource monitoring; and a computerized inventory and analysis. Critical restoration projects and resource monitoring measures may be recommended for implementation concurrently with the preparation of the comprehensive plan. These projects will be selected based on continued assessment of restoration needs as determined by the involved Federal and non-Federal partners. The reconnaissance phase (initial assessment) initiates the development of a comprehensive plan, critical restoration projects, and long-term resource monitoring. The State of Illinois has indicated a willingness to be a local sponsor.

Fiscal Year 2002 funds are being used to complete the initial assessment. Upon approval of the initial assessment and execution of a cost sharing agreement, the remaining funds will be used to continue into the feasibility phase development of the comprehensive plan. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$5,385,000, which is to be shared on a 65-35 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,885,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	3,500,000
Feasibility Phase (Non-Federal)	1.885.000

The reconnaissance phase is scheduled for completion in June 2002. The feasibility study is scheduled for completion in June 2006.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Illinois River Ecosystem Restoration, IL Rock Island District	2,770,000	901,000	52,000	365,000	1,452,000

The Illinois River and Waterway is a major tributary of the Upper Mississippi River System (UMRS). The UMRS is designated a nationally significant ecosystem by the Fiscal Year 1985 Supplemental Appropriations Act and the Water Resources Development Act of 1986, which mandated that the rivers be managed to balance competing interests in this natural resource. The Illinois River Basin encompasses 30,000 square miles, covering 44 percent of the land area of the State of Illinois. The principal problems impeding the restoration of habitat in the Illinois River Basin are sedimentation of backwaters and side channels, degradation of tributary streams, fluctuations in hydrologic regimes and water levels, and other adverse impacts caused by human activity. Particular emphasis will be placed on identifying restoration activities that are delineated in the State of Illinois' "Integrated Management Plan for the Illinois River Watershed" report. Ongoing efforts include developing site specific projects and conducting a multi-agency restoration needs assessment to identify desired future conditions and restoration needs in the basin. Potential recommendations include activities within the river corridors such as island creation, side channel restoration, protection and creation of wetlands, improved water level management, and floodplain function. In addition, efforts will be focused on potential restoration of the smaller tributaries and watersheds through stream and wetlands restoration, water retention, and riparian buffers. The Feasibility Cost Sharing Agreement with the State of Illinois was signed on 4 August 2000.

Fiscal Year 2002 funds are being used to continue the feasibility phase. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$5,340,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,440,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,670,000
Feasibility Phase (Non-Federal)	2,670,000

The reconnaissance phase was completed in August 2000. The feasibility study is scheduled for completion in December 2005.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Rock River, IL and WI Rock Island District	935,000	130,000	189,000	182,000	434,000

The Rock River originates in the lake region of southeastern Wisconsin and flows southward to join the Mississippi River just below Rock Island, Illinois. The watershed includes all or parts of 13 counties in Wisconsin and 15 in Illinois. Major tributaries of the Rock River are Green River, Rock Creek, Elkhorn Creek, Kishwaukee River, Pecatonica River, Sugar River, Turtle Creek, and Yahara River. The Illinois Department of Natural Resources is the local sponsor. The Wisconsin Department of Natural Resources was also interested in co-sponsoring one study, but was not able to secure funding at this time. The study will address ecosystem restoration opportunities throughout the Illinois portion of the drainage basin and will evaluate the overall degradation of the Rock River. Ecosystem restoration activities could include stream restoration, wetland creation, wildlife habitat restoration, fish passage, land surface restoration, recommendations for maintaining viable populations of native species, and other engineering solutions to environmental problems in the watershed. A holistic review of ecosystem management practices will be conducted in partnership with state and Federal agencies to restore fish and wildlife habitat and in the development of a system-wide management plan. Particular emphasis will be placed on restoration of wetlands, neotropical migrants, and Federal and state significant species.

Fiscal Year 2002 funds are being used to continue the feasibility phase. The funds requested for Fiscal Year 2003 will be used to continue the feasibility study phase. The estimated cost of the feasibility phase is \$1,670,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	\$1,770,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	835,000
Feasibility Phase (Non-Federal)	835,000

The reconnaissance phase was completed in May 2001. The feasibility study is scheduled for completion in December 2005.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
IOWA					
Fort Dodge, Iowa	335,000	0	63,000	87,000	185,000

The City of Fort Dodge is located in Webster County, Iowa. The study area is a corridor of the Des Moines River within the city limits. This section of the Des Moines River is located between two dams and is bordered by the downtown business district. The city has developed an \$8.5 million plan to transform the river corridor into parklands and recreation facilities. The City of Fort Dodge seeks assistance in determining the impact of a 2-to 4-foot pool raise on the Des Moines River. The study would include a hydraulic/hydrology analysis that would focus on the effects that the pool raise would have on the deposition of sediment, the storm sewer system, and the floodplain. The study would examine structural integrity of the related dams, shoreline restoration and stabilization measures, and potential fish passage measures, which could be used to improve the riverfront ecosystem. The City of Fort Dodge has indicated a willingness to share equally in the feasibility phase cost that may follow the reconnaissance study. The reconnaissance phase is scheduled to be completed in December 2002, which is 12 months after initiation of the study. If determined to be a viable project, the subsequent feasibility phase would be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. The City of Fort Dodge has indicated a willingness to be a local sponsor.

Fiscal Year 2002 funds are being used to initiate the reconnaissance phase. The funds requested for Fiscal Year 2003 will be used to complete the reconnaissance phase. If the reconnaissance report is certified to be in accord with policy, the remaining funds would be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$470,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$570,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	235,000
Feasibility Phase (Non-Federal)	235,000

The reconnaissance phase is scheduled for completion in December 2002. The feasibility study is scheduled for completion in September 2004.

Mississippi Valley Division

23

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
LOUISIANA					
Amite River and Tributaries Ecosystem Restoration, LA New Orleans District	2,100,000	100,000	125,000	150,000	1,725,000

The study area includes the 2,000-square-mile Amite River drainage basin in southeastern Louisiana and southwestern Mississippi. Approximately 30 miles of the Amite River corridor have directly experienced degradation of fish and wildlife habitat with potentially many more miles indirectly negatively impacted. Bottomland habitats continue to decrease in area and diversity as vegetation is removed. Approximately 10,690 acres have been directly disturbed in the study area and the potential exists for a total degradation to 24,000 acres. The degradation includes a reduction in wildlife habitat, stream and floodplain environment, and aggravation of existing flooding problems. Problems can be attributed to wider floodplain and shallower water depths, reduction in river length and the resulting steepened river gradient, reduction of the sinuosity through meander cut-offs, increased turbidity, increased temperature, and an increase in the unvegetated areas and man-made changes within the river corridor. River length from 1940 to 1981 has been reduced as much as 10 percent. Preliminary analyses indicated that a 20 percent reduction in river length would produce a stage increase of 6 to 9 inches inducing structural flooding. The steeper gradient of the river increases scour forces, and bridge collapses have been attributed to this force. Removal of riparian vegetation and mining of point bars reduce the resistance of riverbanks to erosion during floods. The elimination of streambank vegetation and mining operations produces a turbid stream negatively impacting many fish species. The Amite River has three to four times the number of exceedances of turbidity than comparable streams in the vicinity. As the habitat deteriorates, wildlife that uses the river and floodplain ecosystem decreases in quantity and diversity. The Amite River, which once flooded a densely vegetated valley bottom, now spreads across bare sand areas and tailings piles at mining sites allowing a multitude of geomorphic changes during flood events. The study will determine the feasibility of restoring the Amite River ecosystem to a condition similar to its natural state. This effort will consider the physical and limnological aspects of the site, and its broader landscape or watershed setting, to address all related issues and constraints. Alternatives will be developed to reduce turbidity, lower temperature, and reduce the extent of the physical changes within the river corridor in an effort to achieve fish and wildlife restoration, and restore outdoor recreation opportunities. This effort will significantly contribute to the watershed management objectives of the State of Louisiana. The heel splitter clam, an endangered species, exists in the basin and is threatened by the degraded stream conditions. Negotiations of the feasibility cost sharing agreement continue with the potential local sponsor, the Louisiana Department of Environmental Quality.

Fiscal Year 2002 funds are being used to continue into the feasibility phase. The funds requested for Fiscal Year 2003 funds will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$4,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase is scheduled for completion in May 2002. The feasibility study is scheduled for completion in September 2013.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Gulf Intracoastal Waterway, Ecosystem Restoration, LA New Orleans District	2,100,000	0	100,000	100,000	1,900,000

The study area is located in southern Louisiana along the Gulf Intracoastal Waterway (GIWW) in the reaches of Mile 36.4 to Mile 0.0 East and Mile 0.0 to Mile 266 West on the Mississippi River. These reaches include: Mile 10.0 to Mile 12.0 West, in the vicinity of Cutoff Bayou, near the intersection of the GIWW and the Mississippi River Gulf Outlet (MRGO); Mile 18.0 to Mile 22.0 East, at the crossing of Bayou Perot; Mile 210.0 to Mile 214.0 East, in the vicinity of Lacassine National Wildlife Refuge; and Mile 218.0 to Mile 224 East, in the vicinity of Cameron Prairie National Wildlife Refuge. Bankline erosion of valuable Federal, state and privately owned marshes is occurring in Orleans, Jefferson and Cameron Parishes adjoining and near the GIWW. The study will investigate methods of enhancing bank stabilization throughout the waterway. A plan will be developed to address ecosystem restoration and protection needs between the Chef Menteur Pass and the Sabine River and provide solutions to salinity intrusion, tidal erosion, wave-induced erosion and other water resource-related problems in the area. Bankline stabilization would aid in maintaining threatened land bridges and lake rims that reside along both sides of the GIWW. This would also result from these improvements include the stabilization of fishery production and retention and improvement of wildlife habitats. Both resident and migratory species would be greatly benefited. Economic benefits would include the reduction in maintenance dredging on the GIWW due to prevention of sediment influx and improvement of recreational activities along the GIWW. The Louisiana Department of Natural Resources, the tentative local sponsor, has indicated intent to share equally in the feasibility phase.

Fiscal Year 2002 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2003 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase is scheduled for completion in January 2003. The feasibility study is scheduled for completion in September 2013.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Louisiana Coastal Area Ecosystem Restoration, LA New Orleans District	17,500,000	2,796,000	888,000	585,000	13,231,000

The study area encompasses a complex coastal wetlands and barrier island ecosystem located in south Louisiana, from the Sabine River to the Pearl River. This area includes an infrastructure that supports coastal communities, commercial and industrial developments, a robust seafood industry, international inland and sea ports, and oil and gas production and processing facilities. There are numerous Federal projects in the area, which include those for flood protection, navigation, river control, and control of salinity and water levels. Developments in the study area, along with other factors such as sea level rise, have contributed to the accelerated deterioration of coastal Louisiana's wetlands. The Louisiana coastal wetlands represent about 40 percent of the Nation's total and are experiencing about 80 percent of the entire Nation's wetlands losses. Prior to these developments and the construction and operation of Federal projects, the south Louisiana coastal ecosystem was largely self-sustainable. However, if no action is taken to protect and restore this ecosystem, the Louisiana coastal wetlands are in jeopardy of permanent and irreversible loss. In a coastwide grassroots effort termed the Coast 2050 initiative, Federal and state resource agencies, local governments, special interest groups, and the public developed the Coast 2050 Plan. This plan, completed in December 1998, documents the perceived coastal problems and describes potential strategies for sustainable coastwide ecosystem restoration. The State of Louisiana provided a letter of intent, dated 22 March 1999, to cost-share as the non-Federal sponsor of the feasibility study. The Coast 2050 Plan supports the Louisiana Coastal Area—Ecosystem Restoration, Louisiana reconnaissance report approved May 1999. The primary purpose of the study is environmental restoration which is in accord with Administration policy. Studies covering the nine basins are planned for execution under the Louisiana Coastal Area authority. The Feasibility Cost Sharing Agreement was executed in February 2000. The Comprehensive Coastwide Ecosystem Restoration, Louisiana, study is underway in Fiscal Year 2002 and will continue with the Fiscal Year 2003 funds. Additional studies underway are Atchafalaya Reef, Louisiana; Mississippi River Delta Management, Louisiana; Barataria Basin Barrier Shoreline, Louisiana: and Barataria Basin Marsh Creation, Louisiana. The latter two studies are expected to generate interim feasibility reports in Fiscal Year 2003 and move into the PED phase.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$35,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

\$35,000,000
N/A
17,500,000
17,500,000

The reconnaissance phase was completed in February 2000. The feasibility study is scheduled for completion in September 2013.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003 Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
MINNESOTA					
Upper Mississippi River, Watershed Management, Lake Itasca to Lock and Dam 2, MN St. Paul District	1,950,000	297,000	126,000	400,000	1,127,000

Conditions in the Upper Mississippi River basin have changed since the original headwaters reservoirs were constructed in the early 1900's. From its source at Lake Itasca in northern Minnesota, to Lock and Dam 2 at Hastings, Minnesota, the Upper Mississippi River is suffering from impacts of almost 100 years of continual changes. This area is faced with increased flood damage reduction needs, conflicting reservoir operational plans, land and water development pressures, more definitive Tribal rights, dwindling natural resources, decline of fish and wildlife populations, increased demands for water supplies, and water quality issues. There is a growing recognition that addressing the needs in this part of the Mississippi River is important to the region, as is maintaining the viability of the lower Mississippi River. Resource managers at all levels of government recognize the need for a cooperative partnership and development of a coordinated and comprehensive land and watershed development and management strategy that addresses all of these needs. A basin-wide comprehensive planning approach was tentatively scoped and fully coordinated with non-Federal entities. Such a basin planning approach was found to have a high potential for a Federal interest, but no non-Federal sponsor was identified to pursue such a comprehensive study. On the basis of preliminary Federal interest discussed in the Reconnaissance Study, dated June 2001, three cost-shared feasibility studies were identified. There is Federal interest in initiating the feasibility phase of study for the Surface Water Use (Metro Area), Minnehaha Creek Watershed, and South Washington Watershed studies. These studies will result in Federal projects and significantly improved and integrated land and water management in the study area. The potential sponsor for the first interim feasibility study, South Washington Watershed, is the South Washington Watershed District.

Fiscal Year 2002 funds are being used to continue the reconnaissance phase to negotiate feasibility cost sharing agreements and continue into the feasibility phase with initiation of one of three recommended studies. Funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$3,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,650,000
Reconnaissance Phase (Federal)	250,000
Feasibility Phase (Federal)	1,700,000
Feasibility Phase (Non-Federal)	1,700,000

The reconnaissance phase for the first of three interim feasibility studies is scheduled for completion in April 2002. The feasibility study completion date is September 2006.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Red River of the North Basin, MN, ND, SD and Manitoba, Canada St. Paul District	8,345,000	287,000	315,000	1,078,000	6,665,000

The Red River of the North, a northward flowing stream, originates at the convergence of the Ottertail River, Minnesota and Bois de Sioux River, Minnesota and North Dakota and ends at Lake Winnipeg in Manitoba, Canada. Within the United States, the Red River drains portions of South Dakota, Minnesota, and North Dakota and forms the border between the latter two. The basin has lost much of the natural environment that existed in early settlement times, and flooding has repeatedly caused economic and human hardship. Major flood events totaling billions of dollars in damages have occurred in 1826, 1852, 1893, 1897, 1914, 1919, 1950, 1974, 1975, 1978, 1979, 1985, 1989, 1996, and 1997. Significant floods with substantial documented damages occurred on tributaries in other years as well. Severity of flooding is on the rise. Drainage, river modifications, and land use changes (including those for enhancement of agriculture) adversely affected the natural ecosystems. The basin's water resources issues have been the focus of several watershed planning and management initiatives. The study will address flood damage reduction and ecosystem restoration. Federal agencies, State agencies in Minnesota, North Dakota, and South Dakota, local units of government, non-profit environmental organizations, Canadian interests, business and agricultural representatives, and citizens participating in support of these initiatives see this study as critical to continued basin planning and implementation. Willing cost-share sponsors regional entities such as the Red River Watershed Management Board, Red River Basin Board, Bois de Sioux Watershed District, and local units of government such as the Cities of Fargo and Moorhead. In addition, a number of stakeholders have committed to support this effort, e.g., the North Dakota State Water Commission, Minnesota Department of Natural Resources, Monitoba Conservation, Minnesota Center for Environmental Advocacy, etc. Reconnaissance studies completed to date indicate that further investigation i

Fiscal Year 2002 funds are being used to complete the reconnaissance phase, and if the reconnaissance report is certified to be in accord with policy, continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$16,020,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$16,355,000
Reconnaissance Phase (Federal)	335,000
Feasibility Phase (Federal)	8,010,000
Feasibility Phase (Non-Federal)	8,010,000

The reconnaissance phase for the first interim feasibility study is scheduled for completion in September 2004. The completion schedule for each follow-up feasibility study will be established during negotiations with sponsors to determine the scope of study. The feasibility study is scheduled for completion in September 2009.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
WISCONSIN					
Baraboo River, WI	2,750,000	140,000	151,000	350,000	2,109,000

The scope of the Baraboo River reconnaissance study was expanded to include the entire Wisconsin River Basin. The Wisconsin River Basin is located in central Wisconsin, and flows into the Mississippi River near Prairie du Chien, Wisconsin. The proposed study will establish a Federal interest in proceeding with a basin-wide water quality study along with ecosystem restoration projects such as channel restoration; fish passage restoration of aquatic and riparian habitats; erosion and sediment control; and wetland restorations for reducing flood damage and improving water quality, fisheries, populations of endangered and threatened species, and natural river equilibrium. It is expected that a combination of structural and nonstructural solutions will be necessary to achieve the objectives for the long term. Fully addressing the deteriorated state of the river system will require a holistic assessment of the watershed, implementation of numerous ecosystem restoration projects, and preparation of a management plan for the long-term vitality of the river system. The study will take full advantage of historical data on the environment, water quality, aquatic habitat, and hydrologic data and models. The Wisconsin Department of Natural Resources has expressed a strong interest in being the local sponsor. Other supporters and potential partners are Sauk County, the Sand County Foundation, local watershed boards, and the City of Baraboo and other communities in the watershed.

Fiscal Year 2002 funds are being used to complete the reconnaissance phase at full Federal expense, and if the reconnaissance report is certified to be in accord with policy, continue into the feasibility phase. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$5,100,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,300,000
Reconnaissance Phase (Federal)	200,000
Feasibility Phase (Federal)	2,550,000
Feasibility Phase (Non-Federal)	2,550,000

The reconnaissance phase is scheduled for completion in May 2002. The feasibility study completion date is September 2008.

Total - Watershed/Ecosystem Studies 44,497,000 6,134,000 3,351,000 4,495,000 30,517,000

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2002	FY 2002	FY 2003	After FY 2003
·	\$	\$	\$	\$	\$
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f. Comprehensive Studies: The amount of \$2,399,000 is requested to continue three feasibility studies in Fiscal Year 2003.

**ARKANSAS** 

 White River Basin
 4,435,000
 225,000
 284,000
 400,000
 3,526,000

 Comprehensive, AR and MO
 Memphis District

The White River Basin comprises approximately 27,765 square miles of which 10,622 square miles are in the southern part of Missouri and the remaining 17,143 square miles are in the northern and eastern portion of Arkansas. The basin contains five large Corps multi-purpose lakes: Beaver, Table Rock, Bull Shoals, Norfork, and Greers Ferry. Clearwater Lake, primarily for flood control, is also in the upper basin. This comprehensive basin study will investigate water resource related problems such as navigation, restoration and protection of environmental resources, water quality, hydropower, flood damage reduction, and water supply. Local interests, local industries, and beneficiaries in adjacent areas desire navigation improvements. The area is deemed significant as a migratory waterfowl wintering area and includes several Federal and state wildlife refuges. Releases from Corps lakes sometime fail to meet state water quality standards for dissolved oxygen and adversely affect the ecosystem below the dam. Land use practices result in nutrient runoff (both point and non-point sources), sediment, and other water quality factors that affect water supply reserves, hydropower capability (by placing restrictions on releases), recreational opportunities, and fish and wildlife habitat in the entire basin. Federal, state, and private natural resource agencies and organizations are highly supportive of conducting a comprehensive study. The project sponsors tentatively identified are Arkansas Game and Fish Commission, Arkansas Soil and Water Conservation Commission, Arkansas Natural Heritage Commission, Missouri Department of Natural Resources, and Missouri Department of Conservation.

Fiscal Year 2002 funds are being used to execute a study cost-sharing agreement and continue into the feasibility phase of the study. Fiscal Year 2003 funds will be used to continue basin-wide studies. The preliminary estimated cost of the feasibility study is \$8,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to 25 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

\$8,735,000
135,000
4,300,000
4,300,000

The study is authorized by Section 729 of the Water Resources Development Act of 1986, as amended by Section 202 of the Water Resources Development Act of 2000. The reconnaissance phase is scheduled for completion in April 2002. The feasibility study is scheduled for completion in September 2010.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
ILLINOIS					
Upper Mississippi River Comprehensive Plan Rock Island District	3,000,000	0	630,000	1,814,000	556,000

The Great Flood of 1993 resulted in catastrophic damages throughout much of the Upper Mississippi River Basin. While existing flood protection works reduced or prevented damages to many properties, these measures often proved inadequate to withstand the magnitude of flooding experienced in 1993. This natural disaster killed 47 people and damaged or destroyed an estimated 72,000 homes and over 35,000 commercial structures. The flood interrupted virtually all forms of transportation on and across the Mississippi River and many of its tributaries. It is estimated that the total monetary damages from the flood were between \$15 and \$20 billion. The study area includes the Upper Mississippi and Illinois Rivers and their floodplains. The Comprehensive Plan will develop an integrated strategy and implementation plan for environmentally sustainable systemic flood plain management and flood damage reduction by means of 1) structural and nonstructural floodplain management strategies, 2) continued maintenance of the navigation project, 3) management of bank caving and erosion, 4) watershed nutrient and sediment management, 5) habitat management, 6) considering recreation needs, and 7) other related purposes. The Comprehensive Plan will be developed integrally with the Upper Mississippi and Illinois Navigation Study. The study would be fully responsive to national interests and the needs of the citizens of the Upper Mississippi River basin. It will identify opportunities to increase environmental outputs, improve floodplain management, and stimulate and/or enhance floodplain-compatible economic development throughout the Upper Mississippi River System through the development of a system-wide management plan. The plan will be a collaborative effort among three Corps Districts, other Federal agencies, the states of MN, WI, IA, IL, and MO, and appropriate non-Federal organizations. The plan will identify future management actions and make recommendations for systemic, multiple-benefit, improvements within the floodplains of t

Fiscal Year 2002 funds are being used to initiate the plan at full Federal expense. Funds requested for Fiscal Year 2003 will be used to continue the plan.

The plan is scheduled for completion in March 2004.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
MISSOURI					
St. Louis Riverfront, MO & IL	1,215,000	0	315,000	185,000	715,000

The study area, approximately 3,011 square miles, is located in St. Louis City, St. Louis County and Jefferson County, in Missouri, and St. Clair, Madison, and Monroe Counties in Illinois. The primary focus of the study will address flood damage reduction, aquatic habitat restoration, and harbor safety issues. Secondary focus will be on public access to the river, regional greenways and bike trails, and other recreational/economic development opportunities. Flood damage reduction investigations will concentrate on Reach 5 of the St. Louis Flood Protection project, which was never constructed. During the 1993 flood, this area experienced severe flooding which led to the evacuation of 11,800 people and 400 businesses due to 51 propane tanks floating off of their concrete supports at the Phillips Petroleum facility. Aquatic habitat restoration investigations will focus on the severely degraded Mill Creek watershed, which has a rich history in the St. Louis metropolitan area dating back to the early 1800's. Other areas under consideration for aquatic habitat restoration include the Big River, the Meramec River, and other smaller watersheds within the study area. The St. Louis waterfront area is a major interchange for reconfiguring tows due to the change from open river to pooled river. (The last lock on the Mississippi is Locks 27 in Granite City, Illinois.) Because of this, many fleeting areas exist along both banks of the river within the study boundary. Under normal river stages, the fleeting is an efficient operation; however, as demonstrated during high water in 1993 and drought conditions in 1989, safety becomes a huge concern, particularly with all of the bridge crossings in the metropolitan area. The study will address these safety issues with potential opportunities such as off-channel fleeting and designated traffic lanes. Investigations into greenways, bike trails, and public access to the river will focus primarily on linkages to the existing Confluence Greenway network through flood control rights-of-

Fiscal Year 2002 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2003 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$1,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,115,000
Reconnaissance Phase (Federal)	315,000
Feasibility Phase (Federal)	900,000
Feasibility Phase (Non-Federal)	900,000

The reconnaissance phase is scheduled for completion in February 2003. The feasibility study is scheduled for completion in July 2006.

550.000 225.000	1.229.000	2.399.000 4.797.000

4 February 2002 31

Mississippi Valley Division

	Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
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g. Project Review Studies: The amount of \$1,000,000 is requested to continue one feasibility study in Fiscal Year 2003.

#### **ILLINOIS**

Upper Mississippi and Illinois 67,705,000 60,336,000 2,864,000 1,000,000 3,505,000 Navigation Study, IL, IA, MN, MO, & WI Rock Island District

The Upper Mississippi and Illinois Waterway System Navigation Study was initiated to address the need for navigation improvements on the Upper Mississippi River and the Illinois Waterway. In August 2001, a restructured feasibility study was resumed to refocus on environmental sustainability along with the needs of commercial navigation of this river system. The study changes are being made in consideration of the recommendations of the National Research Council and based on input from a Federal agency task force. LTG Robert Flowers, Chief of Engineers, paused the study in March 2001 to consider the recommendations of the National Research Council and to solicit advice from other Federal agencies. The National Research Council recommended several major changes in the economic and environmental analyses in February 2001. The Chief of Engineers invited Washington-level representatives from the Department of Agriculture, Environmental Protection Agency, Fish and Wildlife Service, and Maritime Administration to provide a broader Federal perspective on the needs of the river system and to advise the Corps on how to best implement the National Research Council recommendations. An interim report will be completed by July 2002 that will contain the needs and opportunities for navigation improvements and related ecosystem restoration and flood plain management. An assessment of the need for and potential contents of a comprehensive plan for meeting those needs shall also be presented. The study will be collaborative, with a higher degree of interagency and public participation.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study and complete an Interim Report for the Chief of Engineers in July 2002. Fiscal Year 2003 funds will be used to continue the feasibility phase of the study.

The reconnaissance phase was completed in March 1993. The feasibility study is scheduled for completion in September 2007.

Total - Project Review Studies:	67,705,000	60,336,000	2,864,000	1,000,000	3,505,000
TOTAL SURVEYS	159,831,000	77,693,000	11,050,000	10,379,000	60,709,000

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Project	Federal Cost	FY 2002	FY 2002	FY 2003	After FY 2003
•	\$	\$	\$	\$	\$

- 3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) NEW: None.
- 4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) CONTINUING:
  - a. Watershed/Ecosystem: The amount of \$ 437,000 is requested to initiate two and continue one PED activity in Fiscal Year 2003.

**ILLINOIS** 

Peoria Riverfront Development, IL 1,250,000 0 100,000 237,000 913,000 Rock Island District

Peoria, Illinois, is located on the Illinois River in Peoria County. The study area includes the portion of the Illinois River and its tributaries that flows next to, or directly impacts, the downtown Peoria Riverfront Development project. This stretch of river, a riverine lake called Peoria Lake, has lost roughly 70 percent of its volume with depths reduced from approximately 8 feet to 2.5 feet since 1903. This loss of depth has seriously impacted fish and wildlife. Contributing to the filling is sediment deposition from creeks draining into the Illinois River. A system feasibility report addressing possible lake and tributary restoration alternatives is scheduled for completion in April 2002. The draft recommended plan is estimated to cost \$21.3 million, with an estimated Federal cost of \$13.8 million and an estimated non-Federal cost of \$7.5 million. The draft plan includes dredging of approximately 200 acres with the creation of three islands in Peoria Lake and wetland restoration along Farm Creek. The project is estimated to provide 866 average annual habitat units of environmental benefit. PED will ultimately be cost shared with the State of Illinois, Department of Natural Resources, and/or other willing sponsors, at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Total Estimated Preconstruction			
Engineering and Design Costs	\$1,670,000	Engineering and Design Costs	\$1,670,000
Initial Federal Share	1,250,000	Ultimate Federal Share	1,085,500
Initial Non-Federal Share	420,000	Ultimate Non-Federal Share	584,500

The project is not authorized for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Fiscal Year 2002 funds are being used to initiate the PED. Fiscal Year 2003 funds will be used to continue the PED. The PED phase is scheduled for completion in March 2006.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
LOUISIANA					
Louisiana Coastal Area – Barataria Basin, Barrier Shoreline Restoration, LA New Orleans District	18,750,000	0	0	100,000	18,650,000

The project provides for actions to restore/maintain barrier headlands, islands, and shorelines. The barrier islands and barrier shoreline from the Fourchon headland to Sandy Point, a distance of approximately 53 miles, are among the most rapidly retreating shorelines in the Louisiana coastal area. These areas would be restored by placement of dredged material, construction of wave absorbers, and vegetative plantings on the island platforms. The recommended alternative is projected to create marsh and beach habitat. Additional benefits would be gained by protecting, restoring, or creating wooded areas critical for neotropical migrants. An interim feasibility report is scheduled for completion in March 2003. The estimated cost for the recommended project is \$3,523,000,000, with a Federal cost of \$2,289,950,000 (65%) and a non-Federal cost of \$1,233,050,000. The non-Federal sponsor, the Louisiana Department of Natural Resources, has expressed intent to cost share the PED phase. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of project construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$25,000,000	Engineering and Design Costs	\$25,000,000
Initial Federal Share	18,750,000	Ultimate Federal Share	16,250,000
Initial Non-Federal Share	6,250,000	Ultimate Non-Federal Share	8,750,000

The project is not authorized for construction. Cost sharing for the project will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Fiscal Year 2003 funds will be used to initiate the PED phase. The PED is scheduled for completion in September 2017.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Louisiana Coastal Area- Barataria Basin, Marsh Creation and Restoration, LA New Orleans District	17,781,000	0	0	100,000	17,681,000

The project provides for marsh creation and shoreline protection for the Bayou L'Ours North Unit, marsh creation for the Bayou L'Ours South Unit, marsh creation and isolation from the Southwestern Louisiana Canal for the Leeville Unit, marsh creation for the Caminada Unit and marsh creation, ridge restoration, fill LOOP pipeline canal and degrade impoundment levee for the Chenier Unit. Implementation of the recommended plan would result in a gain of 13,006 acres (6,399 average annual habitat units) of emergent wetlands. An interim feasibility report is scheduled for completion in March 2003. The estimated cost for the recommended project is \$364,860,000, with a Federal cost of \$237,159,000 (65 percent) and a non-Federal cost of \$127,701,000. The non-Federal sponsor, the Louisiana Department of Natural Resources, has expressed intent to cost share the PED phase. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of project construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$23,708,000	Engineering and Design Costs	\$23,708,000
Initial Federal Share	17,781,000	Ultimate Federal Share	15,410,000
Initial Non-Federal Share	5,927,000	Ultimate Non-Federal Share	8,298,000

The project is not authorized for construction. Cost sharing for the project will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Fiscal Year 2003 funds will be used to initiate the PED phase. The PED is scheduled for completion in September 2017.

Total Watershed/Ecosystem 37,781,000 0 100,000 437,000 37,244,000

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
b. Navigation: The amount of \$183,0	000 is requested to initiate and conti	nue one PED activity ir	n Fiscal Year 2003.		
LOUISIANA					
Bayou Sorrel Lock, LA New Orleans District	1,500,000	0	0	110,000	1,390,000

Bayou Sorrel Lock is a feature of the Atchafalaya Basin project, which is a feature of the Flood Control, Mississippi River and Tributaries project. The project flood flow line for the Atchafalaya Basin was modified in 1986 to the current elevation of 28.7. The lock must be modified or replaced. The need to modify Bayou Sorrel Lock presents an opportunity to address increasing navigation concerns at this lock. Planning, engineering, and design of the modification or replacement for flood reduction benefits were delayed until the optimum navigation plan could be studied. The tentative plan is the replacement of the existing lock with a new 75 by 1,200 foot concrete chamber lock immediately adjacent to the existing lock. Preconstruction engineering and design cost would be all Federal.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,500,000	Engineering and Design Costs	\$1,500,000
Initial Federal Share	1,500,000	Ultimate Federal Share	1,500,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	0

The project is not authorized for construction. Fiscal Year 2002 funds are being used to complete the feasibility phase in May 2002. Fiscal Year 2003 funds will be used to initiate PED. The PED is scheduled for completion in September 2013.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
MISSOURI					
St. Louis Harbor, MO & IL	4,590,000	3,420,000	179,000	73,000	918,000

The Port of Metropolitan St. Louis has grown to be one of the Nation's leading inland ports; however, the port has a shortage of riverfront sites suitable for waterway dependent industrial use. In view of projected long-term growth in waterborne commerce moving through the St. Louis market, additional harbor facilities are needed. The authorized project has a St. Louis Municipal Dock sediment control structure and a 6,900-foot harbor along the Chain of Rocks Canal in Illinois. The Chief of Engineer's Report dated April 30, 1984 reflected a total cost of \$31,000,000, with an estimated first Federal cost of \$10,400,000 and an estimated first non-Federal cost of \$20,600,000. The current project cost, without an allowance for inflation through the construction period, is \$46,148,000 (\$15,524,000 Federal and \$30,624,000 non-Federal) at October 1999 price levels. A general reevaluation study is currently underway to determine if the project is incrementally feasible. The plan includes a limited reevaluation as directed by Section 415 of the Water Resources Development Act of 1996. The limited reevaluation will determine the feasibility of reducing interior flooding at the Illinois site. The current project formulation eliminates the sediment control structure at the St. Louis Municipal Dock and indicates a reduced harbor length along the Chain of Rocks Canal. The sponsors have recently acquired the Charles Melvin Price Support Center just downstream from the mouth of the Chain of Rocks Canal. This new site is now being evaluated as the possible recommended location. The reevaluation will determine the economic feasibility of a harbor with dimensions between 2,000 feet and 3,500 feet long at an estimated cost of \$20,000,000. Updated project cost and economic data will be included in the General Reevaluation Report. The Tri-City Regional Port District is the local sponsor for the project and has expressed support for the project. The sponsor understands the financing and cost-sharing requirements and is ready to sign a design agreement. PED will ultimately be cost shared at the rate for the project to be constructed but PED costs required after completion of the reevaluation will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$1,600,000 <sup>1</sup>	Engineering and Design Costs	\$1,600,000	1
Initial Federal Share	1,200,000	Ultimate Federal Share	1,280,000	
Initial Non-Federal Share	400,000	Ultimate Non-Federal Share	320,000	

<sup>&</sup>lt;sup>1</sup> Excludes PED expenditures prior to Fiscal Year 1996 and the cost of reevaluation report being completed with PED funds.

The project was authorized for construction by the Water Resources Development Act of 1986. The cost sharing for construction will be 80 percent Federal and 20 percent non-Federal in accordance with the Water Resources Development Act of 1986. Fiscal Year 2002 funds are being used to continue the General Reevaluation Report, including engineering, economic, and environmental analyses. Fiscal Year 2003 funds will be used to complete the Reevaluation Report and to continue PED. The PED is scheduled for completion in September 2008.

Total - Navigation 6,090,000 3,420,000 179,000 183,000 2,308,000

4 February 2002 37

Mississippi Valley Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Project	Federal Cost	FY 2002	FY 2002	FY 2003	After FY 2003
•	\$	\$	\$	\$	\$

- c. Beach Erosion Control: None.
- d. Flood Control: The amount of \$1,131,000 is requested to initiate two and continue seven PED activities in Fiscal Year 2003.

#### **ILLINOIS**

Davenport, Iowa 1,200,000 100,000 125,000 61,000 914,000 Rock Island District

The project is located at Davenport, Iowa (population of 102,000 – 1999 census) in Scott County, on the right bank of the Mississippi River. Davenport is one of the Quad-Cities, along with Bettendorf, Iowa, and Moline, East Moline, and Rock Island, Illinois. Plans were developed in the 1970's and the early 1980's for structural flood control. A General Design Memorandum was completed in February 1982. The recommended project, estimated to cost \$33.9 million, with an estimated Federal cost of \$29.7 million and an estimated non-Federal cost of \$4.2 million, includes construction of levees, floodwalls, closure structures, and interior flood control items. The average annual benefits were estimated to be \$3.7 million. The benefit-cost ratio is 1.17 to 1 based on the latest economic analysis dated July 1981. The project was deferred at the request of the City. After experiencing three significant flood events in the last ten years (1993, 1997, and 2001), the City of Davenport officials have requested that the project be restudied to evaluate current alternatives and benefits for flood damage reduction. The PED resumption, approved by the Energy and Water Development Appropriations Committee in October 2001, will put emphasis on key public facilities such as the water and wastewater treatment plants. The reconnaissance level phase was initiated in November 2001 and is scheduled to be completed in November 2002. PED will ultimately be cost shared at the rate of the project to be constructed but will be financed through the reconnaissance level study at 100 percent Federal and the follow-on PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	\$1,600,000	Total Estimated Preconstruction Engineering and Design Costs	\$1,600,000
Reconnaissance Level study (Federal)	100,000	Reconnaissance Level study (Federal)	100,000
Engineering and Design Costs	1,500,000	Engineering and Design Costs	1,500,000
Initial Federal Share	1,100,000	Ultimate Federal Share	1,100,000
Initial Non-Federal Share	400,000	Ultimate Non-Federal Share	400,000

The project is authorized for construction by the Section 201 of the Flood Control Act of 1970. Cost sharing will be 75 percent Federal and 25 percent non-Federal in accordance with the Water Resources Development Act of 1986. The funds requested for Fiscal Year 2003 will be used to continue preconstruction engineering and design. The PED is scheduled for completion in September 2007.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Wood River Levee, IL St. Louis District	1,200,000	405,000	215,000	130,000	450,000

The project area is located in the Mississippi River flood plain of Madison County, Illinois, just upstream of the City of St. Louis. The area is protected by an urban design levee, authorized in 1938 and constructed in the 1950's. Based on the Reconnaissance Report dated April 1999, preconstruction engineering and design is being resumed to initiate a cost-shared reconstruction evaluation to address the aging infrastructure and determine its applicability as a Federal interest. The recommended project, estimated to cost \$25,000,000, with an estimated Federal cost of \$18,750,000 and an estimated non-Federal cost of \$6,250,000, includes rehabilitation of the levee system to bring it into original performance compliance. The reevaluation will investigate the reconstruction or replacement of 7 pump stations, 37 gravity drains, 147 relief wells, and over 21 miles of levee. In response to a system failure during the flood of 1993, only swift action by Wood River Drainage and Levee District prevented major damages. On 6 April 2000, a Design Agreement was executed with the Wood River Drainage and Levee District. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$1,600,000	Engineering and Design Costs	\$1,600,000	
Initial Federal Share	1,200,000	Ultimate Federal Share	1,200,000	
Initial Non-Federal Share	400,000	Ultimate Non-Federal Share	400,000	

The project is authorized for construction by the Flood Control Act of 1938. Cost sharing will be 75 percent Federal and 25 percent non-Federal in accordance with Section 103 of the Water Resources Development Act of 1986. Fiscal Year 2002 funds are being utilized to continue the reconstruction evaluation. Fiscal Year 2003 funds will be used to finalize the reconstruction evaluation. PED is scheduled for completion in September 2005.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
LOUISIANA					
Jefferson Parish, LA New Orleans District	1,500,000	0	90,000	25,000	1,385,000

Jefferson Parish is located along the Mississippi River in southeast Louisiana. The parish is part of the major urban center in the New Orleans Metropolitan Statistical Area. Jefferson Parish has a population of 448,300 (1990). The study area is relatively flat and divided into three hydraulically independent areas. Most of the developed areas are protected by levee systems from river and hurricane flooding and drained by pumps which discharge primarily into estuarine water bodies such as Lake Pontchartrain and Barataria Bay. The leveed areas are divided by natural and man-made barriers into many sub-basins which are webbed with drainage canals which terminate at pumping stations. Heavy rainfall has produced major floods in Jefferson Parish in six of the last 12 years. Between 1977 and 1986, 22,000 claims amounting to \$122,000,000 were filed with the Federal Emergency Management Agency. In April 1980, May 1980, April 1983, November 1989, and May 1995, Jefferson Parish was declared a Federal disaster area due to extensive rainfall flooding. Local interests have made substantial improvements to the flood control systems but have not kept pace with the increasing severity of the problem. The feasibility study is addressing potential solutions to flood damages. Possible alternative solutions to the flooding problems include: canal improvements, removal of canal obstructions, and increased pumping capacities. The disastrous flood event in May 1995 prompted a Congressional Directive to expedite construction of the economically justified components identified in the reconnaissance report. Subsequent to the authorization of the Southeast Louisiana project, the Jefferson Parish study scope was reevaluated, resulting in a revised cost estimate and a revised completion date. The average annual benefits and the benefit-cost ratio are yet to be determined. The local sponsor, Jefferson Parish, is fully committed to cost sharing the project. PED will ultimately be cost shared at the rate for the project to be constructed, but

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$2,000,000	Engineering and Design Costs	\$2,000,000
Initial Federal Share	1,500,000	Ultimate Federal Share	1,300,000
Initial Non-Federal Share	500,000	Ultimate Non-Federal Share	700,000

The project is not authorized for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Fiscal Year 2002 funds are being used to initiate the PED phase. Fiscal Year 2003 funds will be used to continue PED. The PED is scheduled for completion in September 2013.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Lafayette Parish, LA New Orleans District	750,000	0	0	125,000	625,000

Lafayette Parish is located along the Vermilion River in southwest Louisiana. The study area encompasses the flood prone areas of Lafayette Parish in the Vermilion River Basin as well as areas of St. Martin Parish near the Bayou Tortue Swamp. The majority of structures susceptible to flood damages are located along the Vermilion River corridor within and adjacent to the city limits of Lafayette. The Vermilion River is the major drainage artery for the study area and has an estimated drainage area of 561 square miles. Significant floods have occurred in Lafayette Parish in 1922, 1927, 1940, 1946, 1953, 1955, 1959, 1961, 1964, 1966, 1969, 1971, 1980, 1985, 1991, 1993, and 1995. Since 1978, approximately 1,000 claims were reported for the communities in Lafayette Parish at a cost exceeding \$5,000,000. Additionally, over 160 repetitive loss claims have been reported to the National Flood Insurance Program since 1978. A feasibility report is being conducted to reduce flood damages in Lafayette Parish. The anticipated solution is expected to consist of dredging the Vermilion River, retention facilities, and non-structural alternatives. The average annual benefits and the benefit-cost ratio are yet to be determined. The total project cost is expected to be approximately \$80,000,000. The Lafayette Parish government has indicated a willingness to support such efforts and take on the responsibilities required of a non-Federal cost-sharing sponsor. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost-sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,000,000	Engineering and Design Costs	\$1,000,000
Initial Federal Share	750,000	Ultimate Federal Share	650,000
Initial Non-Federal Share	250,000	Ultimate Non-Federal Share	350,000

The project is not authorized for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Non-Federal funds are being used to complete Fiscal Year 2002 feasibility efforts. The funds requested in Fiscal Year 2003 will be used to initiate the PED phase. The PED is scheduled for completion in September 2011.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Orleans Parish, LA New Orleans District	750,000	0	31,000	25,000	694,000

Orleans Parish is located along the Mississippi River in southeast Louisiana. The parish is part of the major urban center in the New Orleans Metropolitan Statistical Area. Orleans Parish has a population of 497,000 (1990). The Mississippi River bisects the area creating an east bank and west bank basin. Most of the developed areas are protected by levees from river and hurricane flooding and drained by pumps, which discharge primarily into estuarine water bodies such as Lakes Pontchartrain and Borgne. The leveed areas are divided into many sub-basins by natural and man-made barriers. In April 1980, May 1980, April 1983, November 1989, and May 1995, Orleans Parish was declared a Federal disaster area due to excessive rainfall flooding. The disastrous flood event in May 1995 prompted a Congressional Directive for the Corps to expedite construction of the economically justified projects identified in the reconnaissance report for the Southeast Louisiana area. The feasibility study scope of work was revised based on the Southeast Louisiana project to address areas that continue to experience damage due to flooding. The alternatives designed for both the east bank and west bank of Orleans Parish consist of a system of culverts, canals, and pump stations. The recommended project is estimated to cost \$95,000,000 (\$61,800,000 Federal and \$33,200,000 non-Federal). The average annual benefits and the benefit-cost ratio are yet to be determined. The local sponsor, the New Orleans Sewerage and Water Board, is fully committed to cost-share the project. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,000,000	Engineering and Design Costs	\$1,000,000
Initial Federal Share	750,000	Ultimate Federal Share	650,000
Initial Non-Federal Share	250,000	Ultimate Non-Federal Share	350,000

The project is not authorized for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Fiscal Year 2002 funds are being used to initiate the PED phase. The funds requested in Fiscal Year 2003 will be used to continue PED. The PED is scheduled for completion in September 2013.

Mississippi Valley Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
West Shore-Lake Pontchartrain, LA New Orleans District	1,100,000	0	0	100,000	1,000,000

The West Shore-Lake Pontchartrain, Louisiana, study addresses hurricane flooding problems in St. Charles Parish west of the Bonnet Carre' Floodway, St. John the Baptist Parish and St. James Parish. The main population centers in the study are LaPlace and Reserve. Major flooding in the area occurred as a result of Hurricane Betsy (1965) and Juan (1985), and as a result of the 1973 flood on the Mississippi River. Damages totaled \$1,000,000 for Hurricane Betsy, \$950,000 for the 1973 flood, and \$4 million for Hurricane Juan. There are approximately 4,000 residential structures in the study area vulnerable to hurricane flooding. Population and potential damages are expected to continue to grow due to the lack of undeveloped land in the New Orleans area. The feasibility study is scheduled for completion in September 2002. The recommended project is estimated to cost \$80 million with an estimated Federal cost of \$52 million and an estimated non-Federal cost of \$28 million. The project includes the construction of approximately 10.5 miles of levees and floodwalls extending from the west guide levee of the Bonnet Carre' Spillway to U.S. Hwy 61 in the vicinity of the Reserve-Relief Canal. The estimated average annual benefits amount to \$10 million. The estimated benefit-cost ratio is 2.1 based on the latest economic analysis dated June 1997. The Pontchartrain Levee District entered into a feasibility cost sharing agreement to serve as the non-Federal sponsor for the feasibility study in March 1998. The Pontchartrain Levee District is currently the sponsor for the \$105 million St. Charles feature of the Lake Pontchartrain and Vicinity Project and they fully understand the cost sharing responsibilities of the non-Federal sponsor. Support for this project is evidenced by the numerous letters from state and local governments and from congressmen. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be n

Total Estimated Preconstruction		Total Estimated Preconstruction		
Engineering and Design Costs	\$1,467,000	Engineering and Design Costs	\$1,467,000	
Initial Federal Share	1,100,000	Ultimate Federal Share	954,000	
Initial Non-Federal Share	367,000	Ultimate Non-Federal Share	513,000	

This project is not authorized for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Fiscal Year 2002 funds are being used to complete the feasibility phase in September 2002. Fiscal Year 2003 funds will be used to initiate PED. The PED is scheduled for completion in September 2013.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002	Allocation FY 2002	Tentative Allocation FY 2003	Additional to Complete After FY 2003
MISSOURI	Ψ	Ψ	Ψ	Ψ	Ψ
Chesterfield, MO	1,320,000	104,000	381,000	385,000	450,000

The Missouri River drains an area of about 525,000 square miles and empties into the Mississippi River approximately 15 miles upstream of St. Louis, Missouri. The Monarch-Chesterfield Levee is located along the right bank of the Missouri River between river miles 46.0 and 38.5. The existing private levee system is 11.5 miles long and protects approximately 4,240 acres from the 100-year flood event. During the Great Flood of 1993, the existing levee failed causing flood damages in excess of \$200,000,000. The project is estimated to cost \$58,090,000, with an estimated Federal cost of \$37,759,000 and an estimated non-Federal cost of \$20,331,000, at October 2000 price levels. The project consists of raising the existing levees on the Missouri River and Bonhomme Creek from 1.5 to 7.0 feet in order to provide protection from a 500-year flood event. The project will also include relief wells, a sheet pile cutoff, and berms 150 to 300 feet wide and 4 to 15 feet thick to control underseepage. Other features such as roadways, railroad and roadway closure structures, retaining walls, relocations, and pumping stations with gravity structures are included in the project as well. Environmental mitigation features including 6.82 acres of forested wetlands, 3.73 acres of open water, and 2.39 acres of emergent wetlands are also included. The local sponsor has submitted and received approval from the Assistant Secretary of the Army (Civil Works), for three credit applications for work. The scope of work covered by these applications includes 1) construction of three pump stations, 2) levee enlargement from Centaur Road to Interstate 64/U.S. 40, and 3) realignment of the levee near Boone's Crossing and levee enlargement along Bonhomme Creek. Average annual benefits are \$4.4 million, all for flood damage reduction. The benefit-cost ratio is 1.97 to 1 based upon the latest economic analysis dated October 2000. The Monarch-Chesterfield Levee District is the local sponsor for the project. A design agreement, including a detailed Preconstruction Engineering and Design (PED) cost estimate and schedule was signed by the sponsor and Corps, and PED initiated in August 2001. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction. PED is financed at the rate of 75 percent Federal and 25 percent non-Federal with any adjustments that may be necessary to bring the non-Federal contribution in line with the overall project cost-sharing being accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,760,000	Engineering and Design Costs	\$1,760,000
Initial Federal Share	1,320,000	Ultimate Federal Share	1,144,000
Initial Non-Federal Share	440,000	Ultimate Non-Federal Share	616,000

The Water Resources Development Act of 2000 authorized the project for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1996. Fiscal Year 2002 funds are being utilized to continue PED which includes surveying and mapping, geotechnical field investigation and testing, levee/seepage berm design and initiation of the closure structure design. The funds requested for Fiscal Year 2003 will be used to continue PED. PED is scheduled for completion in September 2005.

Mississippi Valley Division

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
River des Peres, MO St. Louis District	3,867,000	1,481,000	152,000	130,000	2,104,000

River des Peres drains a 111-square mile area in the city of St. Louis and St. Louis County, Missouri, and empties into the Mississippi River. The floodplain encompasses about 7,500 acres of mostly urban development. The authorized project consists of two subprojects--Deer Creek and University City. The maximum flood of record occurred in 1957; property damages would have totaled \$12,300,000 in October 1989 dollars and development conditions. The estimated project cost at October 1992 price levels totaled \$23,500,000, with an estimated Federal cost of \$17,400,000 and an estimated non-Federal cost of \$6,100,000. Current financial and economic data are unavailable for each of the subprojects. The Deer Creek portion of the project consists of 2.5 miles of channel widening and stabilization improvements through the cities of Rock Hill, Webster Groves, Brentwood, and Maplewood. The majority of structures affected by Deer Creek flooding are commercial, including manufacturing, two industrial parks, warehousing and distribution structures, and retail shops. Residential structures are also flooded. A 100-year flood would affect 162 units in the Deer Creek portion of the project area. The project was deferred in the preconstruction engineering and design (PED) phase when the original sponsor, the Metropolitan St. Louis Sewer District, was unable to continue as the sponsor. The Metropolitan St. Louis Sewer District and the mayors of Brentwood, Rock Hill, Webster Groves, and Maplewood signed a Design Agreement on 17 May 2001 to serve as the local sponsors for the Deer Creek portion of the project. The University City portion of the project consists of channel enlargement and stabilization along about 2.5 miles of the University City branch of upper River des Peres, a recreation trail of 2.53 miles within the improved channel right-of-way, and a small recreation park to be constructed by non-Federal interests on non-project lands. The Metropolitan St. Louis Sewer District and the city of University City signed a letter of intent in February 2001. PED will ultimately be cost shared at the rate for these projects to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustment that may be necessary to bring the non-Federal contributions in line with the project cost sharing will be accomplished in the first year of construction. The sponsors of both subprojects understand the financing and cost sharing policy for PED and are willing to cost share the PED phase.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$5,156,000	Engineering and Design Costs	\$5,156,000
Initial Federal Share	3,867,000	Ultimate Federal Share	3,867,000
Initial Non-Federal Share	1,289,000	Ultimate Non-Federal Share	1,289,000

The Water Resources Development Act of 1990 authorizes the project for construction. The cost sharing for construction of the project will be 75 percent Federal and 25 percent non-Federal in accordance with the Water Resources Development Act of 1986. Fiscal Year 2002 funds are being used to continue the reevaluation of the Deer Creek portion and initiate the University City portion of the project. The funds requested for Fiscal Year 2003 will be used to continue the reevaluation of both portions. The completion date for PED for Deer Creek and University City is September 2008 and September 2010, respectively.

Project	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
St. Louis Flood Protection, MO St. Louis District	1,684,000	477,000	62,000	150,000	995,000

The St. Louis Flood Protection project area is located in St. Louis, Missouri, on the right bank of the Mississippi River between Miles 176.3 and 187.2 above the mouth of the Ohio River. Approximately 3,160 acres of industrial and commercial development are protected from Mississippi River flooding by the completed St. Louis Flood Protection Project. During the Great Flood of 1993, which was less than the project's design, a short section of the project failed and only quick, extensive emergency actions by the City of St. Louis, Metropolitan St. Louis Sewer District, and Corps of Engineers prevented a large portion of the City of St. Louis from flooding. Significant potential problems identified with the project during 1993 include under seepage, foundation piping (which caused the failure in 1993), insufficient freeboard, pipe crossing, and toe drains and relief wells. Based on the Reconnaissance Report dated February 1999, preconstruction engineering and design is being resumed to initiate a cost-shared reconstruction evaluation to determine the Federal interest in correcting design or construction deficiencies. The recommended project, estimated to cost \$8,000,000, with an estimated Federal cost of \$6,000,000 and an estimated non-Federal cost of \$2,000,000, includes correcting structural deficiencies, correcting geotechnical concerns, and enhancing recreation features within the project area. The City of St. Louis signed the Design Agreement on 2 February 2000. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$2,245,000	Engineering and Design Costs	\$2,245,000
Initial Federal Share	1,684,000	Ultimate Federal Share	1,684,000
Initial Non-Federal Share	561,000	Ultimate Non-Federal Share	561,000

The project is authorized for construction by Public Law 84-256, 9 August 1955. Cost sharing will be 75 percent Federal and 25 percent non-Federal in accordance with Section 103 of the Water Resources Development Act of 1986. Fiscal Year 2002 funds are being utilized to continue the Reconstruction Evaluation Report. The funds requested in Fiscal Year 2003 will be used to continue the Reconstruction Evaluation Report. PED is scheduled for completion in September 2007.

Total - Flood Control	13,371,000	2,567,000	1,056,000	1,131,000	8,617,000
TOTAL - PED	57,242,000	5,987,000	1,335,000	1,751,000	48,169,000
GRAND TOTAL - SURVEYS AND PED	217,073,000	83,680,000	12,385,000	12,130,000	108,878,000

APPROPRIATION TITLE: Construction, General – Channels and Harbors (Navigation)

PROJECT: Chain of Rocks Canal, Mississippi River, Illinois, (Deficiency Correction) (Continuing)

LOCATION: The Chain of Rocks Canal is located on the Mississippi River adjacent to river miles 184 to 194.4 in Madison County, Illinois.

DESCRIPTION: The recommended plan for design deficiency correction involves the installation of relief wells and construction of berms and a pump station. All work is programmed.

AUTHORIZATION: The original project was authorized by the River and Harbor Act of 2 March 1945.

REMAINING BENEFIT-REMAINING COST RATIO: 2.0 to 1 at 7 3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 7 3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 7 3/8 percent (FY 1999).

BASIS OF BENEFIT-COST RATIO: Based on the Chain of Rocks Design Deficiency Report dated July 1997 at October 1996 price levels.

SUMMARIZED FINANCIAL DATA				STATUS (1 Jan 2002)	PERCENT COMPLETE	COMPLETION SCHEDULE
				Entire Project	15	Sep 2007
	Original Pro	ject		PHYSICAL DATA		
Actual Federal Cost			\$59,260,000	PHYSICAL DATA		
Actual Federal Cost			ψ39,200,000	The proposed plan provides for co	rrecting underseens	ne deficiencies on
Actual Non-Federal Cost Cash Contributions Other Costs	\$	0 0	0	the nine-mile long levee, installing nonfunctional relief wells, utility releading fill to berms and filling in love station, and constructing wetland in	30 new relief wells, ocations, landside of wareas, constructing	replacing 50 f the levee,
Total Original Project Cost			\$59,260,000	Station, and constituting wettand if	iningation realtires.	

Mississippi Valley Division

St. Louis District

Chain of Rocks Canal, Mississippi River, Illinois (Deficiency Correction)

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ACCUM PCT OF EST FED COST (Remedial Work Only)

#### Remedial Work

Estimated Federal Cost			\$29,200,000	
Estimated Non-Federal Cost Cash Contributions Other Costs	\$	0	0	
Total Estimated Remedial Cost			\$29,200,000	
Total Estimated Project Cost			\$88,460,000	
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002 Allocation Requested for FY 2003 Programmed Balance to Complete after FY 2003	12		4,385,000 3,617,000 1,299,000 5,684,000 2,037,000 21,479,000	1 19 26
Unprogrammed Balance to Complete after FY 200	JS		Ü	

JUSTIFICATION: The Chain of Rocks Canal Levee System consists of a dual line of levees running parallel to the canal constructed as part of the Chain of Rocks Canal, Illinois, navigation project. The operation and maintenance of these levees is a 100 percent Federal responsibility. The eastern line of this levee system serves as an integral part of the main line levee protection to the East St. Louis and vicinity area. The east levee has demonstrated inadequate underseepage performance during past floods. Quick conditions and sand boils develop on the landside of the levee during high river stages. The original design assumptions related to the coefficients of permeability for the aquifer and top stratum materials were incorrect. The relief well system was found to be deficient. The levee relies on the impoundment of water against the landside toe of the levee in order to maintain levee stability; however, development over the last 40 years has prevented effective use of this method. Correction of the deficiencies will assure the integrity of the levee system and provide urban level protection for the East St. Louis metropolitan area. The average annual benefits for the design deficiency correction, all flood control, are \$2,647,000.

Mississippi Valley Division

St. Louis District

Chain of Rocks Canal, Mississippi River, Illinois (Deficiency Correction)

<sup>&</sup>lt;sup>1</sup> Reflects \$578,000 reduction assigned as savings and slippage and \$1,740,000 reprogrammed from the project.

FISCAL YEAR 2003: The requested amount will be applied as follows:

•	Relocations Lands and Damages Wetland Mitigation Relief Wells Maintenance During Construction ngineering and Design and Administration	\$	128,000 171,000 200,000 836,000 30,000 300,000 372,000
Total	and Administration	\$2	2,037,000

NON-FEDERAL COST: The project is 100 percent Federal.

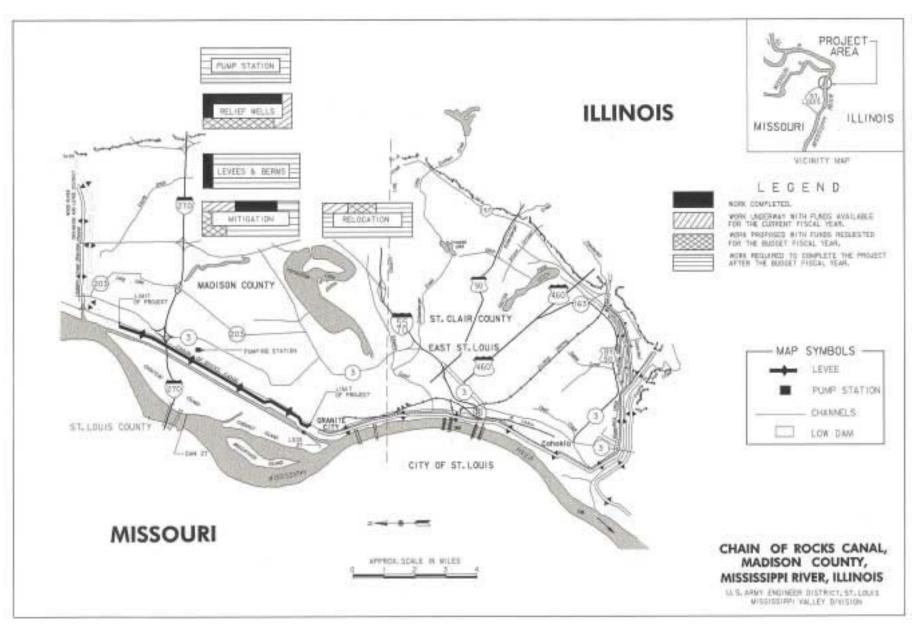
STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$29,200,000 is an increase of \$4,444,000 from the latest estimate (\$24,756,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 608,000
Design Changes	3,974,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	-232,000
Price Escalation on Real Estate	94,000
Total	\$4,444,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment resulted in a Finding of No Significant Impact (FONSI), which was signed 21 May 1996.

OTHER INFORMATION: Previous funding included the actual cost of \$59,260,000 for the construction of the original project, which was completed in FY 1953. Funds to initiate construction for the remedial work were appropriated in FY 1999. Due to constrained budget ceilings, the overall project completion date has slipped from September 2004, the last presented to Congress (FY 2002) to September 2007. This includes a 12-month delay for award/completion of the pump station contract. The slippage also includes a 12-month delay caused by revisions to the environmental assessments for the pipeline relocations. The Corps is seeking a permanent easement of 72 acres within the Charles Melvin Price Support Center, a closing army base, for construction and operational purposes associated with the original project and the deficiency corrections. Fish and Wildlife costs are \$1,175,000.



Mississippi Valley Division

St. Louis District

Chain of Rocks Canal, Mississippi River, Illinois (Deficiency Correction) 51

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Mississippi River Ship Channel, Gulf to Baton Rouge, Louisiana (Continuing)

LOCATION: The project is located in the southeast portion of Louisiana below Baton Rouge, in the parishes of Ascension, Assumption, St. James, St. Charles, Orleans, Lafourche, Jefferson, Plaquemines, St. Bernard, and St. John the Baptist, consisting of the Mississippi River and its major outlet to the Gulf of Mexico, Southwest Pass.

DESCRIPTION: The authorized project will provide more efficient deep-draft navigation access to the New Orleans and Baton Rouge reaches of the Mississippi River via Southwest Pass by enlarging the existing channel to a project depth of 55 feet; enlarging the adjacent channel along the left descending bank in New Orleans to a 40-foot depth, providing a turning basin at Baton Rouge, and providing training works in the passes and in four crossings between New Orleans and Baton Rouge to reduce maintenance. Construction of mitigation measures is required due to the saltwater intrusion caused by the deeper channel. The programmed work includes enlargement of the existing channel to an initial depth of 45 feet in the reach from the Gulf of Mexico to Mile 232.4 above New Orleans, the 40-foot enlargement in New Orleans Harbor, and construction of the mitigation works. The unprogrammed work includes enlargement of the 45-foot channel to 55 feet in the reach from the Gulf of Mexico to Mile 232.4, enlargement of the existing 40-foot channel to 55 feet from Mile 232.4 to Mile 233, construction of a turning basin at Baton Rouge, and training works in the passes.

AUTHORIZATION: Supplemental Appropriations Act of 1985, Water Resources Development Acts of 1986 and 1988, and the Energy and Water Development Appropriations Act of 1993.

REMAINING BENEFIT - REMAINING COST RATIO: 7.3 to 1 at 2-5/8 percent.

TOTAL BENEFIT - COST RATIO: 11.1 to 1 at 8-1/8 percent.

INITIAL BENEFIT - COST RATIO: 8.1 to 1 at 8-1/8 percent (FY 1985).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in July 1981 at 1980 price levels.

SUMMARIZED FINANCIAL DATA			STATUS	PERCENT	PHYSICAL COMPLETION
Estimated Assurantiation Description and (CoE)		Ф 482 900 000	(1 Jan 2002)	COMPLETE	SCHEDULE
Estimated Appropriation Requirement (CoE) Programmed Construction Unprogrammed Construction	\$ 33,614,000 149,186,000	\$ 182,800,000	Phase I (Gulf-Mile 18	96 31. 45')	Indefinite <sup>1</sup>
	,,	4 000 000	Phase II	100	Dec 1994
Estimated Appropriation Requirement (USCG) Programmed Construction Unprogrammed Construction	0 1,200,000	1,200,000	(Mile 181-Ba Phase III (Gulf-Baton l	ton Rouge, 45') 0 Rouge, 55')	Indefinite <sup>2</sup>
Estimated Total Appropriation Requirement Programmed Construction Unprogrammed Construction	33,614,000 150,386,000	\$ 184,000,000	Entire Project	30	Indefinite <sup>2</sup>
Future Non-Federal Reimbursement Programmed Construction Unprogrammed Construction	(902,000) 0	(902,000)			
Estimated Federal Cost (CoE) (Ultimate) Programmed Construction Unprogrammed Construction	32,712,000 149,186,000	\$ 181,898,000			
Estimated Non-Federal Cost (Ultimate) Programmed Construction Cash Contributions \$ 4,750,000 Other Costs 14,581,000 Reimbursements 902,000 Navigation \$ 902,000	20,233,000	\$ 459,000,000			

<sup>&</sup>lt;sup>1</sup> Completion of mitigation will depend on future growth in Plaquemines Parish.

<sup>&</sup>lt;sup>2</sup> Phase III work on the GDM is programmed. The remaining Phase III work is unprogrammed pending the results of the GDM investigations.

# SUMMARIZED FINANCIAL DATA (Continued)

Unprogrammed Construction

\$ 438,767,000

**VCCLIM** 

Cash Contributions \$ 149,475,000 Other Costs 289,292,000 Reimbursements 0

Navigation 0

Total Estimated Programmed Construction Cost	\$ 53,847,000
Total Estimated Unprogrammed Construction Cost	\$ 589,153,000
Total Estimated Project Cost	\$ 643,000,000

27,419,000 575,000 483,000 <sup>1</sup> 27,902,000	PCT. OF EST. FED. COST
200,000 \$ 5,512,000 \$ 149 186 000	16
	575,000 483,000 <sup>1</sup> 27,902,000 200,000

#### PHYSICAL DATA

Channels and Canals:

Southwest Pass: 55 feet deep (Mean Low Gulf) by 750 feet wide, 17.5 miles.

Southwest Pass Bar Channel: 55 feet deep (Mean Low Gulf) by 600 feet wide from Mile 18.0 below Head of Passes to

the -55 foot (Mean Low Gulf) contour in the Gulf of Mexico (Mile 22.1 below Head of

Passes)

Mississippi River: 55 feet deep (Mean Low Gulf) by 750 feet wide, 233 miles long.

Baton Rouge Turning Basin: 55 feet deep (Mean Low Gulf) by 1,600 feet wide, 4,000 feet long.

## Breakwaters and Seawalls:

Control and contraction structures in South Pass and Pass-a-Loutre. Size and number of structures to be determined in the future.

<sup>&</sup>lt;sup>1</sup> Reflects \$92,000 reduction assigned as savings and slippage. Mississippi Valley Division

### Mitigation Measures:

Underwater dredged material sill at Mile 64 Above Head of Passes (top elevation -55.0 Mean Low Gulf), modifications to the Belle Chasse water treatment plant with water supply pipelines to the West Pointe-a-la-Hache and Boothville water treatment plants, and construction of a water supply reservoir at Davant, LA, to supply the East Pointe-a-la-Hache water treatment plant. Until construction of a permanent mitigation plan is completed, an interim plan has been implemented to barge fresh raw water, with Operations and Maintenance, General funds, to three existing water treatment plants during periods of increased salinity caused by the deeper channel. (See Other Information).

JUSTIFICATION: According to the latest data, the ports of South Louisiana, Baton Rouge, New Orleans, and Plaquemines are ranked as the first, fourth, sixth, and seventh ports in the United States, respectively, based on the total tonnage of waterborne commerce. Collectively, these ports represent the greatest concentration of Waterborne Commerce in the United States. Much of this commerce is in liquid bulk and dry bulk oceangoing cargo which could be shipped much more economically using a deeper channel. The cargo was previously shipped in smaller ships or in lightly loaded larger ships over the 40-foot deep channel. The construction of the 45-foot channel has resulted in significant savings in the transportation cost of the oceangoing commerce moving over the channel. Deepening the channel to 55 feet will result in additional significant savings. The average annual benefits, all navigation, are \$1,292,000,000, based on October 1980 prices.

Existing Commerce (000 tons):					
Commodity	1991	1992	1993	1994	1995 <sup>1</sup>
	(000)	(000)	(000)	(000)	(000)
Coal and Coal Products	55,257	51,694	42,295	42,175	43,411
Petroleum and Petroleum Products	67,046	69,173	72,331	70,081	69,582
Crude Petroleum	48,687	52,459	58,877	60,997	55,467
Chemicals and Chemical Products	35,256	36,608	38,511	44,979	46,443
Crude Materials, Inedible					
(except fuels)	36,478	35,381	36,919	40,903	41,300
Primary Manufactured Goods	11,792	10,544	13,476	27,078	28,255
Food & Farm Products	39,045	42,169	39,533	38,317	40,727
Corn	70,059	72,743	65,121	59,522	80,655
Wheat	16,705	21,455	16,223	12,820	13,971
Soybeans	30,171	33,111	31,718	29,911	33,630
Manufactured Equip, Machinery					
& Products	824	845	980	876	938
Miscellaneous	76	161	164	192	266
Total	411,396	426,343	416,148	427,851	454,645

<sup>&</sup>lt;sup>1</sup> Latest available information. Mississippi Valley Division

The average deep draft tonnage trafficked thru the project from 1979 thru 1989 was 183,197,960 tons. The deep draft savings per ton for liquid bulk cargo is \$4.60; for dry bulk cargo, \$6.60, and for general cargo, \$.90. The ships expected to traffic the project in the future would carry up to 150,000 DWT (dead weight tons). Dredged material will be deposited on lands adjacent to the channel from Venice, Louisiana to the Gulf of Mexico. A substantial amount of these lands are within existing rights-of-way. Disposal for construction work above Venice, Louisiana, will be accomplished in the main channel of the Mississippi River.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue:

Permanent Saltwater Intrusion Mitigation Facilities	\$ 100,000
Planning, Engineering and Design - Phase III	100,000

Total \$ 200,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Acts of 1986 and 1988, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Maintenance, Repair, Rehabilitation, and Replacement Costs
Phase I, 45', Gulf - Mile 181.0	\$ 164,000	\$
Provide lands, easements, rights-of-way and dredged material disposal areas.  Modify or relocate pipelines and submarine cables where necessary for the construction of the project.	6,795,000	
Dredge New Orleans Harbor.	1,155,000	
Pay 25 percent of costs to construct the channel to 45 feet (cash contributions and/or equivalent work).	3,237,000	
Pay 25 percent of costs for mitigation reimbursement contributions and/or equivalent work.	5,713,000	
Pay maintenance dredging costs adjacent to New Orleans harbor wharves.  Pay an additional 10 percent of the cost allocated to deep draft navigation within a period of 30 years following completion of construction [which is partially offset by a credit allowed for the value of lands, easements, rights-of-way, relocations and dredged material disposal areas].	902,000	1,507,000
Subtotal, Phase I	\$ 17,966,000	\$ 1,507,000

Annual Operation,

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Phase II, 45', Mile 181 to Baton Rouge  Modify or relocate pipelines and submarine cables where necessary for the construction of the project.  Pay 25 percent of costs to construct the channel to 45 feet (cash contributions).	\$ 736,000 1,531,000	\$
Subtotal, Phase II	\$ 2,267,000	
Phase III, 55', Gulf to Baton Rouge Provide lands, easements, rights-of-way and dredged material disposal areas. Modify or relocate pipelines and submarine cables where necessary for the construction of the project. Pay 25 percent of costs to construct the channel to 45 feet (cash contributions). Pay 50 percent of costs to construct the channel from 45 feet to 55 feet (cash contributions).	\$ 451,000 288,841,000 1,511,000 147,964,000	50.007.000
Pay 50 percent of maintenance dredging costs between 45 feet and 55 feet.		52,667,000
Subtotal, Phase III	\$ 438,767,000	\$ 52,667,000
Project Total	\$ 459,000,000	\$ 54,174,000

The non-Federal sponsor has agreed to make all payments of first costs (excluding the reimbursement) concurrently with project construction and to pay an additional 10 percent reimbursement of the costs allocated to deep draft navigation less a credit for the value of lands, easements, rights-of-way, relocations, and dredged material disposal area, within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: On 13 September 1985, the Governor of the State of Louisiana designated the Louisiana Department of Economic Development, formerly the Department of Commerce, as the local sponsor for the project. A Local Cooperation Agreement for a 45-foot channel from the Gulf of Mexico to Mile 181 Above Head of Passes (Phase I) was executed on 30 June 1986. The first supplement to the Local Cooperation Agreement reflecting the Water Resources Development Act of 1986 cost-sharing provisions was executed on 15 June 1987. A second supplement reflecting the changes required by the Water Resources Development Act of 1988 was executed on 25 June 1990. A third supplement was executed on 28 May 1993 that provides for the local sponsor to construct the permanent saltwater intrusion mitigation facilities. (See Other Information for more details). A Project Cooperation Agreement for the 45-foot channel from Mile 181 to Mile 232.4 (Phase II) was executed on 3 September 1993.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$182,800,000 is an increase of \$3,000,000 from the latest estimate (\$179,800,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount		
Post Contract Award and Other Estimating Adjustments Price Escalation on Construction Features	\$ 179,000 2,821,000		
Total	\$ 3,000,000		

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 2 July 1982. A Supplemental Information Report to this final Environmental Impact Statement addressing the prototype dredging of Fairview Crossing was filed with the Environmental Protection Agency on 28 July 1983. A similar report addressing construction of a prototype saltwater intrusion sill was filed with the Environmental Protection Agency on 14 September 1983. A Supplemental Information Report addressing the underwater dredged material sill at Mile 64 Above Head of Passes, to mitigate for increased saltwater intrusion, was filed with the Environmental Protection Agency on 24 September 1985. An Environmental Assessment/Finding of No Significant Impact for the Venice, Louisiana to Mile 181 Above Head of Passes reach, for dredging four crossings and the approach channels to berthing areas in New Orleans Harbor, was filed with the Environmental Protection Agency on 18 December 1987. Another Environmental Assessment/Finding of No Significant Impact addressing the interim saltwater mitigation plan and revised marsh creation quantities was filed with the Environmental Protection Agency on 22 April 1987. Another Environmental Assessment/Finding of No Significant Impact addressing the training works required at four crossings between mile 181 Above Head of Passes and mile 232.4 Above Head of Passes was signed on 13 July 1990. Another Environmental Assessment/Finding of No Significant Impact addressing the permanent saltwater intrusion mitigation plan (water pipeline construction) was signed on 15 January 1991. An Environmental Assessment/Finding of No Significant Impact evaluating dredging of Sardine Point was completed 1 April 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1982, and funds to initiate construction were appropriated in Fiscal Year 1985.

Dredging of the 45-foot channel south of New Orleans to the Gulf of Mexico was completed on 1 December 1987. Dredging of the 45-foot channel from New Orleans to Mile 181 Above Head of Passes was completed on 17 December 1988. Dredging of the 45-foot channel from Mile 181 Above Head of Passes to Baton Rouge (Mile 232.4) was completed on 9 December 1994.

As a result of severe drought conditions in the midwest part of the country during the summer of 1988, interim saltwater intrusion mitigation measures for the 45-foot channel were implemented on 30 June 1988, with construction of an underwater dredged material sill in the Mississippi River at Mile 63.7 Above Head of Passes which was completed to an elevation of -45.0 feet NGVD on 1 August 1988.

Part of the interim mitigation plan was to barge fresh water to the three municipal water treatment plants at Boothville and at East and West Pointe-a-la-Hache, Louisiana, downstream of the sill. Approximately 101 million gallons of water was barged, commencing on 14 July 1988 and continuing through 2 December 1988. Operations and Maintenance, General, funds were used for both the barging operation and sill construction. The intrusion event was dealt with effectively, and both the sill and the barging of freshwater to Lower Plaquemines Parish were demonstrated to be practicable.

The permanent mitigation plan involves the State of Louisiana assuming the responsibility for Plaquemines Parish to upgrade their existing water distribution system to handle the increase in saltwater intrusion caused by the 45-foot channel. The Corps of Engineers will reimburse the State for the Federal share (75%) of the cost for this plan which is more cost effective than the Corps' barging plan for a 45-foot channel. The State will relieve the Corps of responsibility to mitigate for the potable water needs in lower Plaquemines Parish when this plan is complete. Federal participation in the construction of the permanent mitigation plan is limited by a cost cap. The cost cap was incorporated into the third supplemental local cooperation agreement for Phase I. The cost cap is based on the least costly Federal alternative which is the cost to barge water to Plaquemines Parish during times of increased salinity caused by the deeper channel over the 50-year project life. Once the cost of the permanent mitigation plan equals or exceeds the cost cap, Federal participation in mitigation for Phase I of the project will end. Construction of the permanent mitigation plan began on 21 October 1993. The Corps remains responsible for construction of the underwater sill to mitigate above Mile 64 above Head of Passes when required. Design Memorandum Supplement No. 6 covering the permanent mitigation plan was approved on 7 December 1992.

Phase II of the project provides for the construction of the 45-foot channel from mile 181.0 to Baton Rouge. Language contained in the Fiscal Year 1993 Energy and Water Development Appropriations Conference Report directed the Corps to initiate construction of Phase II immediately after execution of the Project Cooperation Agreement. The Project Cooperation Agreement was executed on 3 September 1993. Construction of the 45-foot channel in this reach began on 31 July 1994 and was completed on 9 December 1994.

The State of Louisiana requested a preliminary analysis of Phase III, the remaining work on the authorized project. This analysis included a review of cost estimates and design assumptions and proposals for maintenance dredging reductions. Based on the results of this analysis, the State of Louisiana requested the Corps to proceed with a General Design Memorandum for the Phase III work. A General Design Memorandum is scheduled for submission in March 2003.

# SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

	PHASET	
Estimated Appropriation Requirement		
(Corps of Engineers)		\$ 26,848,000
Programmed Construction	\$ 26,848,000	
Unprogrammed Construction	0	
Estimated Appropriation Requirement		
(US Coast Guard)		0
Programmed Construction	0	
Unprogrammed Construction	0	
Estimated Total Appropriation Requirement		\$ 26,848,000
Programmed Construction	26,848,000	. , ,
Unprogrammed Construction	0	
Future Non-Federal Reimbursement		902,000
Programmed Construction	902,000	,
Unprogrammed Construction	0	
Estimated Federal Cost (Ultimate)		
(Corps of Engineers)		\$ 25,946,000
Programmed Construction	25,946,000	
Unprogrammed Construction	0	
Estimated Non-Federal Cost (Ultimate)		\$ 17,966,000
Programmed Construction	17,966,000	
Cash Contributions \$ 3,237,000		
Other Costs 13,827,000		
Reimbursements 902,000		
Navigation \$ 902,000		
Unprogrammed Construction	0	
Total Estimated Programmed Construction Cost		\$ 43,912,000
Total Estimated Unprogrammed Construction Cost		\$ 0
Total Estimated Project Cost		\$ 43,912,000

REMAINING BENEFIT - REMAINING COST RATIO FOR PHASE I: Not applicable because construction is complete.

TOTAL BENEFIT - COST RATIO FOR PHASE I: The Phase I channel has been complete since 1988. A total benefit-cost ratio was not computed for Phase I as a separable element.

		PHASE II	
Estimated Appropriation Requirement			
(Corps of Engineers)			\$ 4,594,000
Programmed Construction		\$ 4,594,000	
Unprogrammed Construction		0	
Estimated Appropriation Requirement			
(US Coast Guard)			0
Programmed Construction		0	
Unprogrammed Construction		0	
Estimated Total Appropriation Requirem	ient		\$ 4,594,000
Programmed Construction		4,594,000	
Unprogrammed Construction		0	
Future Non-Federal Reimbursement			0
Programmed Construction		0	
Unprogrammed Construction		0	
Estimated Federal Cost (Ultimate)			
(Corps of Engineers)			\$ 4,594,000
Programmed Construction		4,594,000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost (Ultimate)			\$ 2,267,000
Programmed Construction		2,267,000	
Cash Contributions	\$ 1,513,000		
Other Costs	754,000		
Reimbursements	0		
Unprogrammed Construction		0	
Total Estimated Programmed Construct			\$ 6,861,000
Total Estimated Unprogrammed Constru	uction Cost		\$ 0
Total Estimated Project Cost - Phase II			\$ 6,861,000

REMAINING BENEFIT - REMAINING COST RATIO FOR PHASE II: Not applicable because construction is complete.

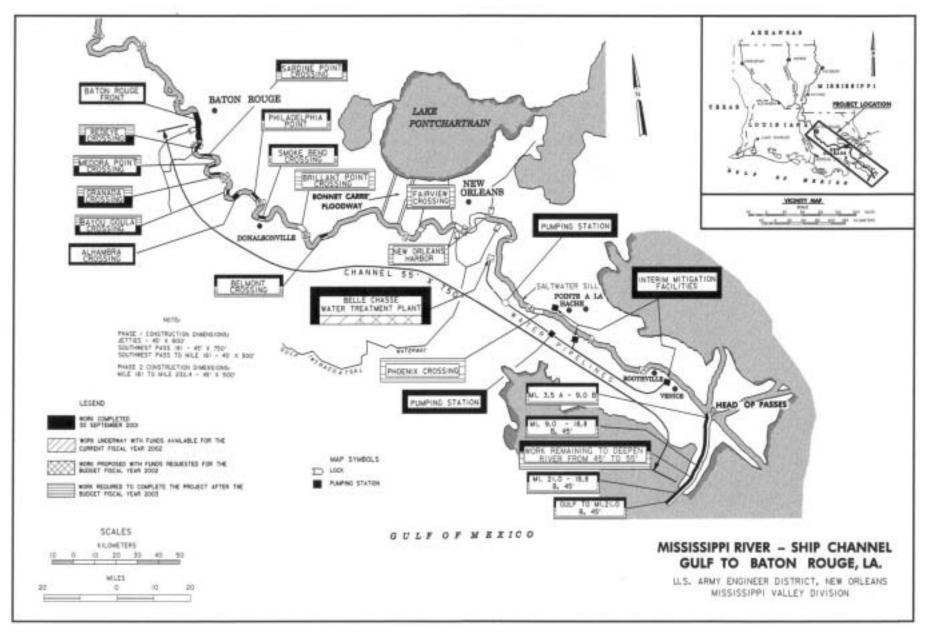
TOTAL BENEFIT-COST RATIO FOR PHASE II: The Phase II channel was completed on 9 December 1994.

# PHASE III

Estimated Appropriation Requirement (Corps of Engineers) Programmed Construction Unprogrammed Construction			\$ \$	3,074,000 149,186,000	\$ 152,260,000
Estimated Appropriation Requirement (US Coast Guard)					\$ 1,200,000
Programmed Construction			\$	0	Ψ 1,200,000
Unprogrammed Construction			\$	1,200,000	
Estimated Total Appropriation Requirement			•	,,,	\$ 153,460,000
Programmed Construction			\$	3,074,000	<b>,</b> , , , , , , , , , , , , , , , , , ,
Unprogrammed Construction			\$ -	150,386,000	
Future Non-Federal Reimbursement			·	, ,	\$ 0
Programmed Construction			\$	0	
Unprogrammed Construction			\$	0	
Estimated Federal Cost (Ultimate)					
(Corps of Engineers)					\$ 152,260,000
Programmed Construction			\$	3,074,000	
Unprogrammed Construction			\$ 1	149,186,000	
Estimated Non-Federal Cost (Ultimate)					\$ 438,767,000
Programmed Construction			\$	0	
Cash Contributions	\$	0			
Other Costs		0			
Reimbursements		0			
Unprogrammed Construction			\$ 4	138,767,000	\$ 438,767,000
Cash Contributions		175,000			
Other Costs	\$ 289,2	292,000			
Reimbursements		0			
Total Estimated Programmed Construction Co Total Estimated Unprogrammed Construction Total Estimated Project Cost - Phase III		udes \$1,200 for	Coast Gua	rd)	\$ 3,074,000 \$ 589,153,000 \$ 592,227,000

REMAINING BENEFIT - REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: The remaining benefit - remaining cost ratio for Phase III is being determined in the GDM studies which are currently underway.

TOTAL BENEFIT - COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: The total benefit - cost ratio for Phase III is being determined in the GDM studies which are currently underway.



APPROPRIATION TITLE: Construction, General – Channels and Harbors (Navigation)

PROJECT: Mississippi River Between the Ohio and Missouri Rivers (Regulating Works), Missouri and Illinois (Continuing)

LOCATION: The project involves improvement of the Mississippi River from the mouth of the Ohio River to the mouth of the Missouri River at mile 195 above the mouth of the Ohio River. The project covers the following counties: (Missouri) St. Louis, Jefferson, Ste. Genevieve, Perry, Cape Girardeau, Scott, Mississippi; (Illinois) Madison, St. Clair, Monroe, Randolph, Jackson, Union, Alexander, and Pulaski.

DESCRIPTION: The project consists of a navigation channel 9 feet deep and not less than 300 feet wide with additional width in bends, from the mouth of the Ohio River to the northern boundary of the City of St. Louis, a distance of approximately 191 miles, thence 200 feet wide, with additional width in bends, to the mouth of the Missouri River. It will be achieved by means of dikes, revetment, construction dredging, and rock removal. All work is programmed.

AUTHORIZATION: River and Harbor Acts of 1910, 1927, and 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 22.6 to 1 at 2.5 percent.

TOTAL BENEFIT-COST RATIO: 10.5 to 1 at 2.5 percent.

INITIAL BENEFIT-COST RATIO: 4.5 to 1 at 2.5 percent (FY 1961).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Upper Mississippi River Master Plan Report of 1982 at 1986 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$267,780,000		Entire Project	79	September 2014
Estimated Non-Federal Cost	0				
Cash Contributions	0				
Other Cost	0		PHYSICA	L DATA	
Total Estimated Project Cost	\$267,780,000		Channel 195 miles Ohio River to St. L		
Allocations to 30 September 2001	\$199,677,000		St. Louis to Missor	uri River 9 x 200 fe	eet
Conference Allowance for FY 2002	4,000,000				
Allocations for FY 2002	3,561,000 <sup>1</sup>				
Allocations through FY 2002	203,238,000	76			
Allocation Requested for FY 2003	1,700,000	77			
Programmed Balance to Complete After FY 2003	62,842,000				
Unprogrammed Balance to Complete After FY 2003	0				

JUSTIFICATION: The Mississippi River between the Ohio and Missouri Rivers is a major artery of the inland waterway system. Commerce in this reach has increased from 4,500,000 tons in 1945 to 121,619,000 tons in 2000 worth approximately \$15 billion. Commerce is expected to increase to 167,000,000 tons by the year 2020; therefore, it is essential that construction of project works be continued at a rate which will insure 9-foot channel depths for a year-round navigation season. The average annual benefits, all navigation, are \$261,809,000.

<sup>&</sup>lt;sup>1</sup> Reflects \$639,000 reduction assigned as savings and slippage and \$200,000 reprogrammed to the project .

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue:

Lands and Damages\$ 156,000Thompson Bend Riparian Corridor15,000Project Dedicated Operating Equipment25,000Planning, Engineering and Design1,304,000Supervision and Administration200,000

NON-FEDERAL COST: None

Total

STATUS OF LOCAL COOPERATION: Not applicable.

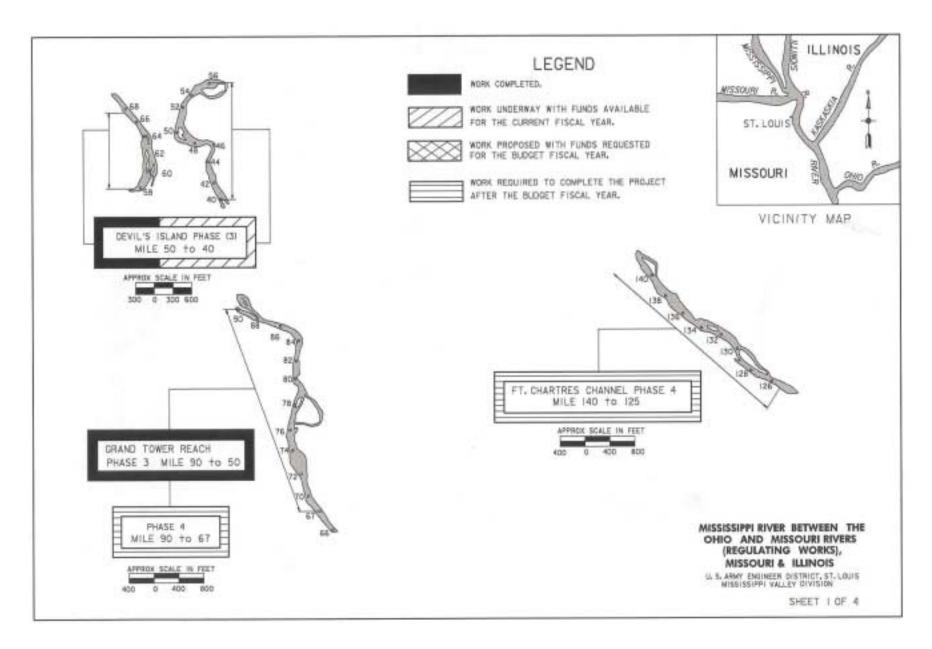
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$267,780,000 is a decrease of \$1,493,000 from the latest estimate (\$269,273,000) presented to Congress (FY 2002). This change includes the following item:

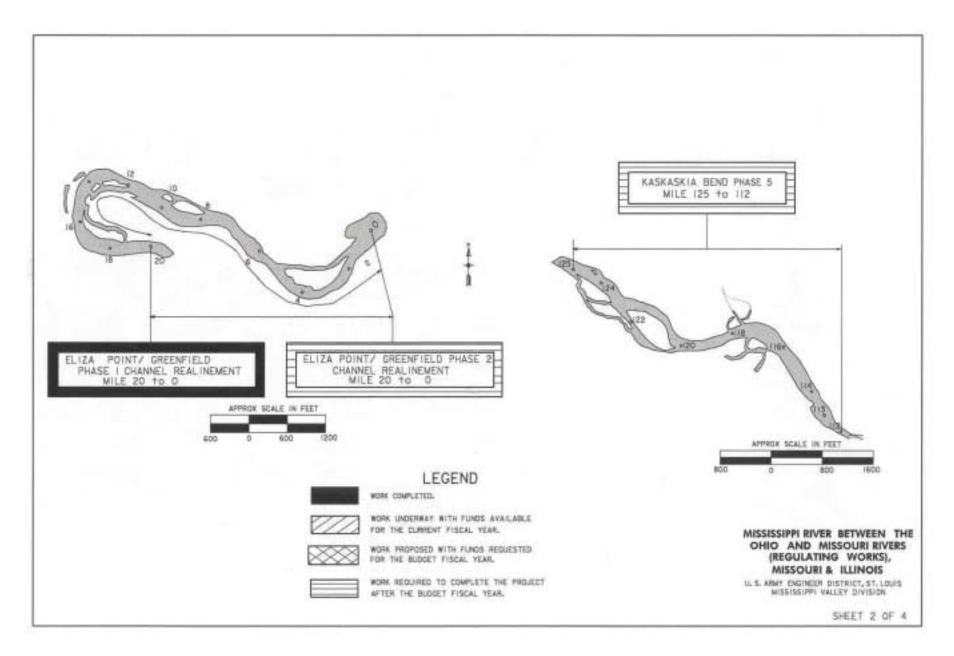
\$ 1,700,000

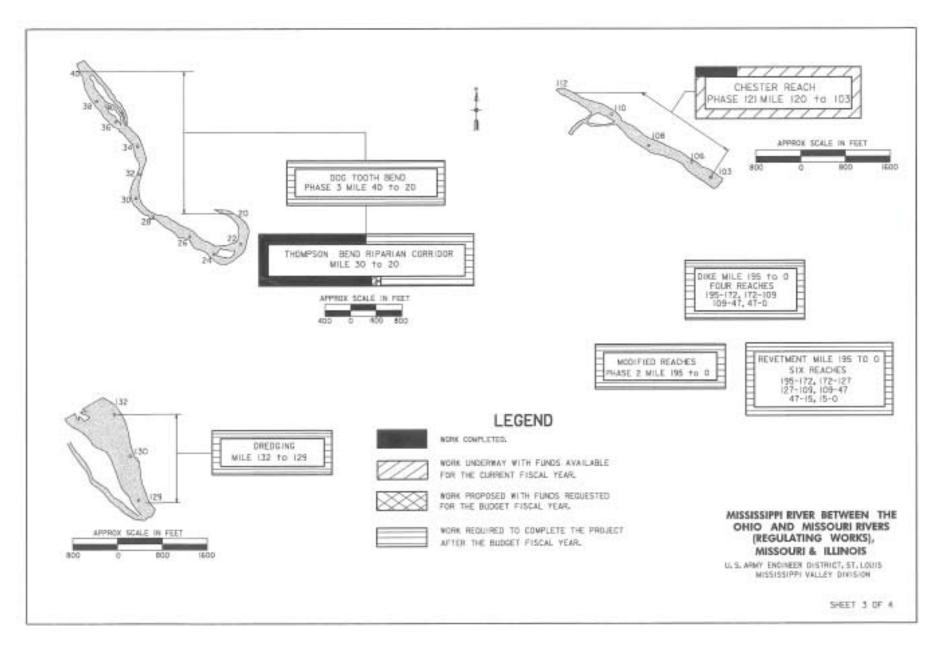
Item	Amount
Price Escalation on Construction Features	\$ 1,493,000
Total	\$ 1,493,000

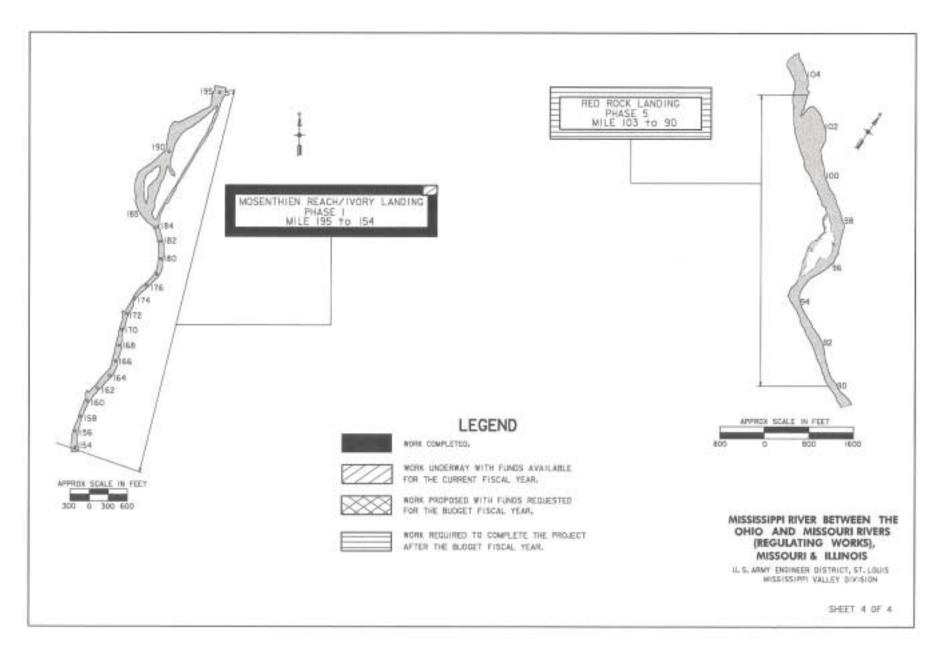
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 8 April 1976 and published in the Federal Register on 23 April 1976. An Environmental Analysis was completed for the Rock Removal and Finding of No Significant Impact signed on 28 October 1988.

OTHER INFORMATION: Planning was initiated prior to 1910, and construction was initiated in 1910. This project requires no mitigation.









APPROPRIATION TITLE: Construction, General – Locks and Dams (Navigation)

PROJECT: Melvin Price Lock and Dam, Illinois and Missouri (Continuing)

LOCATION: Melvin Price Lock and Dam is located in Madison County, Illinois, and St. Charles County, Missouri, in the vicinity of Alton, Illinois, at approximately mile 200.8 above the mouth of the Ohio River.

DESCRIPTION: The project includes one 1,200-foot lock; one 600-foot lock (see Other Information); a gated dam with 9 tainter gates, an overflow dike; removal of most of the existing structure; relocation/abandonment of the Burlington-Northern Railroad bridge and a visitors center. Mitigation land was provided to compensate for wildlife losses due to creation of a new pool for the two-mile distance downstream of the existing structure. Recreation facilities will be developed with the city of Alton, Illinois, consistent with the Water Resources Development Acts of 1986, 1990, 1992, and 1996. The project is part of the Upper Mississippi River Navigation System. All work is programmed.

AUTHORIZATION: Internal Revenue Code of 1954, Title I – Replacement of Locks and Dam 26; Water Resources Development Acts of 1986, 1990, 1992, and 1996; and the Consolidated Appropriations Act, 2001, PL 106-554.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is not applicable since the project is nearing completion.

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 6 7/8 percent (FY 1974).

BASIS OF BENEFIT-COST RATIO: Benefits are based on Supplement No. 2 to Design Memorandum No. 2, approved on 31 August 1979 at October 1978 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$742,982,000		Entire Project Lock and Dam	99 99	Sep 2008 Dec 1994
Estimated Non-Federal Cost Cash Contribution	\$8,565,000	8,565,000		Open to Navigation	100	Feb 1990
Other	0				PHYSICAL DA	ATA
Total Estimated Project Cost		\$751,547,000		Locks: One – 1,200 fe		oformation)
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002		\$731,454,000 500,000 455,000		One – 600 feet x 110 feet (see Other Information)  Dam: Non-navigable 9 tainter gates  Overflow Dike: Earth Embankment, 2000 feet  Spur Dike: Earth Embankment, 2.4 miles		000 feet
Allocations through FY 2002		731,909,000	99	Relocations: Roads (\$2,233,000)	,	
Allocation Requested for FY 2003 1,200,000 Programmed Balance to Complete after FY 2003 \$9,873,000 Unprogrammed Balance to Complete after FY 2003 0		99	Railroad (\$13,933,000) Utilities (\$15,959,000) Pumping Plant: One – 225 cubic feet per second Lands and Damages: Acres – 4,286; Type – Predominantly crop, brush, and timberland and some commercial, recreations and industrial land and improvements fronting the river. Improvements – Industrial, commercial, and		ly crop, brush, rcial, recreational, ents fronting the	

recreation buildings.

 $<sup>^{\</sup>rm 1}$  Reflects \$80,000 reduction assigned as savings and slippage and \$35,000 reprogrammed to the project.

JUSTIFICATION: The poor physical condition of the old Locks and Dam No. 26 and the inability of the locks to handle current and projected traffic without costly delays made replacement imperative. Both the dam and locks were set on piles, which were driven into the riverbed sands and were not supported by bedrock. The structure, which was placed in operation in 1938, had a history of excessive deflections, settlements, and loss of foundation material. Remedial measures were undertaken to correct deficiencies, but permanent repair of the old structure was impractical because of engineering and cost considerations. The average annual waterborne commerce tonnage (1992-2001) was 74.4 million tons valued at approximately \$10 billion. Grains, chemicals, petroleum, and coal account for 90 percent of this traffic. Because of the small size of the locks, multiple lockages were required to pass a complete tow measuring 1,200 feet in length. The average delay to tows at the old Locks No. 26 was approximately 10.5 hours. Based on the Master Plan Study (authorized by P.L. 95-502), a single lock 110 feet wide by 1,200 feet long would have an estimated capacity of 94 to 100 million tons per year. The length of 1,200 feet permits tows to lock through as a single unit, thus eliminating the delays from double locking and congestion. Future tow sizes are expected to remain at 110 feet wide by 1,200 feet long. Total transportation charges for commodity movements by inland water range between 40 and 60 percent lower than least cost alternative modes. More than 60 percent of traffic is grain, the bulk of which is for export. Gulf export grain now moves, depending on the origin and volume, at approximately \$4.00 to \$6.00 savings per ton. Average annual benefits are as follows:

Annual Benefits	Amount
Navigation Recreation	\$ 82,678,000 469,000
Total	\$ 83,147,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

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As-Built Drawings O&M Manuals	\$	40,000 20,000
Visitor Center Exhibits Complete:		863,000
Dam Safety Modifications		22,000
Planning, Engineering and Design		108,000
Supervision and Administration		147,000
Total	\$ 1	,200,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, which are applicable to unstarted separable elements, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay one-half of the separable and joint costs allocated to recreational navigation.	\$6,072,000	\$306,000
Pay 86 percent of the separable and joint costs allocated to public access roads.	1,406,000	
Pay 23.8 percent of the separable and joint costs allocated to Visitor Center exhibits.	1,087,000	
Total Non-Federal Costs	\$8,565,000	\$306,000

STATUS OF LOCAL COOPERATION: The Water Resources Development Act of 1990 contains provisions that allow the state of Illinois and the Corps to enter into a Project Cost-sharing Agreement (PCA) for the construction of riverfront recreation facilities. The Water Resources Development Act of 1992 amended the 1990 Act by allowing cost sharing with other non-Federal interests. Public Law 106-554 directs the Corps to enter into an agreement that allows the City of Alton, Illinois, to construct recreation facilities and the Corps to reimburse the city for 50 percent of the cost. Approximately \$12 million in recreation facilities will be cost-shared. The city of Alton, Illinois, submitted a letter of intent dated 4 June 2001 or sharing the cost of developing recreation facilities along the riverfront at Alton, in the vicinity of the existing structure. A plan for recreational development was prepared, but approval is pending successful resolution of comments. Construction of the recreation facilities will be initiated when a PCA is executed.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$742,982,000 is an increase of \$2,346,000 from the latest estimate (\$740,636,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Design Changes	\$ 346,000 2,000,000
Total	\$ 2,346,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 24 August 1976 and published in the Federal Register on 8 September 1976.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1970, and funds to initiate construction were appropriated in Fiscal Year 1974.

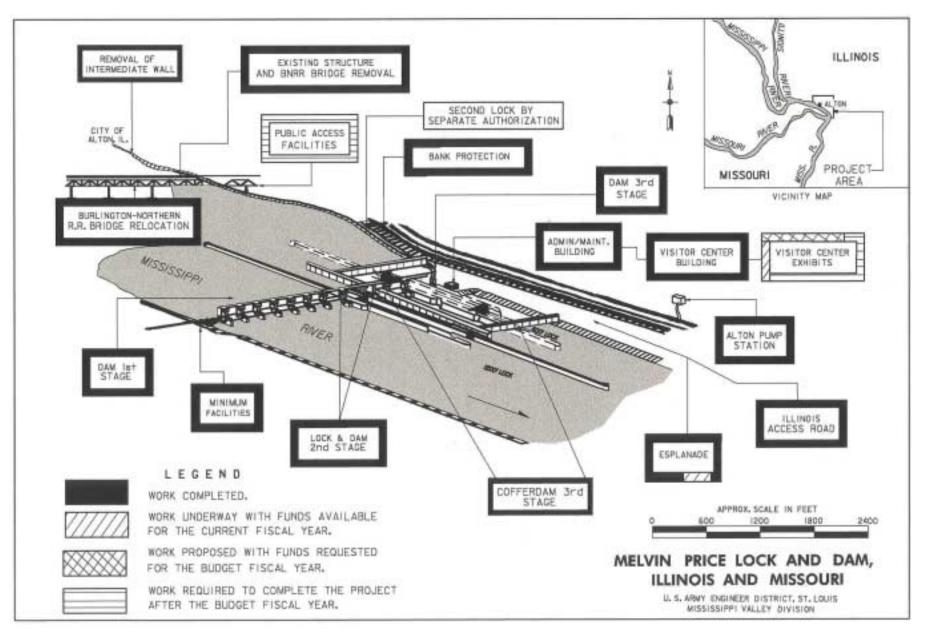
In accordance with Public Law 97-118, the project name changed from Lock and Dam 26 (Replacement) to Melvin Price Lock and Dam.

Dredge material disposal sites were used on Ellis Island during construction, but this phase is complete and no further construction dredging is expected.

The completed 600-foot second lock was funded as a separate project, cost shared with the Inland Waterways Trust Fund. The second lock was authorized by the Supplemental Appropriations Act of 1985 and the Water Resources Development Act of 1986.

The scheduled completion date of September 2008 for programmed work is a slippage from the latest completion date of September 2005 presented to Congress (FY 2002). This change is due to constrained funding ceilings.

Fish and Wildlife mitigation costs are \$3,446,000.



Mississippi Valley Division

St. Louis District

Melvin Price Lock and Dam, Illinois and Missouri

77

4 February 2002

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Inner Harbor Navigation Canal Lock, Louisiana (Continuing)

LOCATION: The project is located within the City of New Orleans, Louisiana, in Orleans Parish. It is a combined deep and shallow draft canal extending northward from the Mississippi River to Lake Pontchartrain.

DESCRIPTION: The plan of improvement consists of construction of a precast, floated-in, concrete lock; replacement of the St. Claude Avenue bridge with a new, low level double bascule bridge; construction of a temporary by-pass bridge at St. Claude Avenue; replacement of the center lift-span and raising of the towers on the Claiborne Avenue bridge; provisions for by-pass channels during construction; extension of the Mississippi River flood protection along the canal to the site of the new lock; and implementation of a community impact mitigation plan. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1956, Water Resources Development Acts of 1976, 1986 and 1996.

REMAINING BENEFIT - REMAINING COST RATIO: 2.2 to 1 at 7-1/8 percent.

TOTAL BENEFIT - COST RATIO: 2.2 to 1 at 7-1/8 percent.

INITIAL BENEFIT - COST RATIO: 1.75 to 1 at 7-3/8 percent (FY 1961).

BASIS OF BENEFIT - COST RATIO: Benefits are from the Evaluation Report approved in February 1998 at October 1998 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 January 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (CoE) General Appropriations Inland Waterways Trust Fund	\$ 381,735,000 <sup>1</sup> 302,265,000	\$ 684,000,000	Total Project	0	September 2014
Estimated Federal Cost (USCG)		45,000			
Estimated Non-Federal Cost Cash Contribution Other	36,720,000 27,280,000 <sup>2</sup>	64,000,000			
Total Estimated Project Cost	27,200,000	\$748,045,000			
	GENERAL APF	PROPRIATIONS	INLAND WATERWAYS TRUST FUND		ACCUM. PCT. OF EST. FED. COST
	Deep Draft	Shallow Draft	Shallow Draft		
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002	0 0 0	30,090,500 6,500,000 5,461,000	30,090,500 6,500,000 5,461,000 <sup>3</sup>		
Allocations through FY 2002	0	35,551,500	35,551,500		10
Allocation Requested for FY 2003 Programmed Balance to Complete After FY 2003 Unprogrammed Balance to Complete After FY 2003	0 79,470,000 0	4,500,000 262,213,500 0	4,500,000 262,213,500 0		12

<sup>&</sup>lt;sup>1</sup> Includes Federal Deep Draft Cost of \$79,470,000 that are not cost shared with the Inland Waterways Trust Fund. Details are included in Supplement 1 to the Evaluation Report, approved by ASA (CW) September 2000.

<sup>&</sup>lt;sup>2</sup> Non-compensable relocations that are the responsibility of the facility owners. Details are included in Supplement 1 to the Evaluation Report, approved by ASA (CW) September 2000.

<sup>&</sup>lt;sup>3</sup> Reflects \$2,078,000 reduction assigned as savings and slippage.

### PHYSICAL DATA

Locks:

New Lock, 110 feet wide by 36 feet deep by 1,200 feet long

Levees and Floodwalls: 6 miles

Relocations: Low Level Bridge, St. Claude Semi-High Level Bridge, Claiborne

Avenue

JUSTIFICATION: The existing Inner Harbor Navigation Canal Lock passes barge traffic between the Mississippi River and the Gulf Intracoastal Waterway at New Orleans and is a vital link in the Gulf Intracoastal Waterway system. The lock also is the connecting link for ship traffic between the Mississippi River-Gulf Outlet and the Mississippi River at New Orleans. Delays to the navigation traffic average 11 hours, with 24-36 hour delays common. The average annual tonnage shipped thru the lock by the barge traffic the last 10 years is about 21,000,000 tons. Coal, petroleum products and crude petroleum account for about 2/3 of the tonnage. Other major commodities include metallic ores, industrial chemicals and non-metallic minerals. The number of ships locked from 1970 through 1995 averaged about 197 per year. This is a reduction in ship lockage since 1961, and is due in part to the development of the Mississippi River-Gulf Outlet channel and the inadequacy of the Inner Harbor Navigation Canal Lock for ship traffic. Studies indicate that, with a new lock, barge traffic would generally be expected to increase to about 40,000,000 tons by 2035, with minimal delays, and that the number of ship lockages by 2035 could be approximately 500 per year. The maximum size ship that could use the new lock is a 68,000,000 DWT Dry Bulk vessel and a 46,000,000 DWT container vessel. Average annual benefits are as follows:

Annual Benefits	Amount	
Navigation Vehicular Advanced Closure Navigation Losses Prevented Savings to Existing Project	\$ 88,466,000 6,547,000 10,640,000 4,053,000	
Total	\$ 109,706,000	

4 February 2002

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue:

Demolish East Side Businesses Community Impact Mitigation Plan	\$ 1,937,000 500.000
Complete:	, , , , , , , , , , , , , , , , , , , ,
Florida Ave Siphon Relocation	4,000,000
Planning, Engineering and Design	2,063,000
Supervision and Administration	500,000
Total	\$ 9,000,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the following requirements:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Maintenance, Repair, Rehabilitation, and Replacement Costs
Modify or relocate utilities and facilities (except railroad bridges) where necessary for construction of the project. (Utility Owners)	\$ 27,280,000	\$
Non-Federal cash requirement based on the incremental cost increase between the Shallow Draft Plan and the Deep Draft Plan.	36,720,000	2,000
Total Non-Federal Costs	\$ 64,000,000	\$ 2,000

The costs of the new lock were apportioned between general cargo navigation (deep draft) and inland navigation (shallow draft). Those costs assigned to inland navigation (22 feet deep x 110 feet wide x 500 feet long), will be funded 50 percent from the Inland Waterways Trust Fund and 50 percent from the general fund of the U.S. Treasury. The costs of all lands, easements, rights-of-way, and dredged material disposal areas and the costs for utility relocations are included in the inland navigation Plan. Only the compensable relocations costs will be cost-shared 50/50. The non-compensable relocations will be the responsibility of the respective non-Federal owners. Those costs assigned to general cargo navigation will be cost-shared in accordance with Section 101 of the Water Resources Development Act of 1986. Details of this cost-sharing are included in Supplement No. 1 to the Evaluation Report approved by the ASA (CW) in September 2000.

STATUS OF LOCAL COOPERATION: The Port of New Orleans by letter dated 14 April 1997 expressed their intent to support the project and furnished their preliminary financing plan to provide their local share. The Project Cooperation of Agreement (PCA) was executed on 27 September 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$684,045,000 is an increase of \$32,000,000 from the last estimate (\$652,045,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Post Contract Award and other estimating adjustments Price Escalation on Construction Features	\$12,312,000 19,688,000
Total	\$32,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the project was submitted to the Environmental Protection Agency (EPA) in February 1998. The Record of Decision was issued in December 1998.

OTHER INFORMATION: Funds to initiate engineering and design were appropriated in Fiscal Year 1957. Funds to initiate construction were appropriated in Fiscal Year 1999. The project completion date of September 2014 is a slippage from the last completion date of September 2011 presented to Congress (FY 2002) due to funding constraints.

The existing lock was completed in 1923 by non-Federal interests, and had been leased by the Federal Government since 1944. On 1 July 1986, the lock, adjacent land, and facilities were purchased from the Board of Commissioners of the Port of New Orleans for \$3,800,000. By purchasing the lock, the Corps received fee title to the lock and appurtenances with operation and maintenance responsibility for the St. Claude and Florida Avenue bridges transferring to the Board of Commissioners of the Port of New Orleans.

Based on Congressional committee guidance in the Fiscal Year 1991 Energy and Water Development Appropriations Bill, an Open Planning Process was adopted in an attempt to build consensus among the major stakeholders for siting the shiplock at the Inner Harbor Navigation Canal (Industrial Canal) site. The Corps and the Port of New Orleans were directed to "... develop a comprehensive plan to identify and mitigate to the maximum extent practicable, any adverse social and cultural impacts of the project." The plan will include "... measures to provide adequate housing, street circulation and enhanced neighborhood amenities to insure the communities adjacent to the project remain as complete, livable neighborhoods during and after construction of the project." The legislation specifically directed the Corps to strictly follow Federal historic preservation policies in evaluating the impact of lock replacement. Also, full compliance with the provisions of the 1986 Water Resources Development Act, which requires "full participation of members of minority groups living in the affected areas" in any work related to the replacement of the lock. Finally, the legislation directed the Corps to give "maximum consideration to lock replacement alternatives which minimize residential and business disruption while meeting the goal of improving waterborne commerce. The recommended plan for the lock replacement has complied with all of these requirements. Neighborhood groups, navigation interests, affected businesses, local, governmental officials, and the Port of New Orleans have comprised various committees that have discussed all the major aspects of the various alternatives studied at this site. The Corps of Engineers and the Port of New Orleans have provided the engineering, economic, and social analyses to these committees for their deliberations.

The final Evaluation Report, based on the Open Planning Process, was approved by HQUSACE in February 1998. The final Evaluation Report recommended that a deep draft lock, 36 feet deep by 110 feet wide by 1,200 feet long be constructed at the Industrial Canal site north of the existing lock using a prefabricated float-in construction method that would require no relocation of residents and that a comprehensive community impact mitigation plan (\$35 million) be implemented in conjunction with the project. The mitigation plan was authorized by the Water Resources Development Act of 1996. In an effort to continue to involve the local stakeholders in the implementation and formulation of the impact mitigation plan, a community based committee was formed. The Corps has entered into a Partnering Agreement with the committee for implementation of the mitigation plan throughout the construction period.

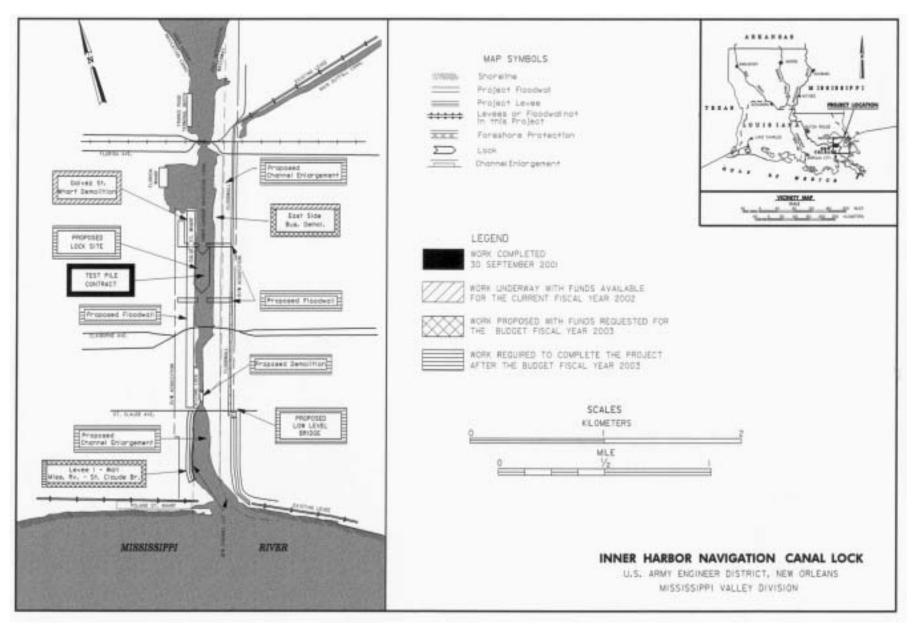
On 30 September 1999, a contract was awarded to a team headed by Gregory C. Rigamer & Associates, Inc., to assist in the establishment of a Community-Based Mitigation Committee (CBMC) and the development of the Partnering Agreement. Upon establishment of the CBMC (which includes representatives from local neighborhood business and religious organizations and local residents), the contractor has led the development of a Needs Assessment and the first 3 year-Mitigation Plan. A contract has been awarded to Xavier University for the job training contract as the first part of the mitigation plan. Only residents in the affected communities adjacent to the IHNC are presently being trained. Additional measures recommended by the CBMC are being initiated in Fiscal Year 2002.

To further comply with the provision in the 1986 WRDA of "full participation of members of minority groups living in the affected areas", construction contracts have included Labor Preference Clauses that require 10 percent of the labor force be obtained from the communities surrounding the IHNC. Also, the District has worked with the local Small Business Administration Office and minority contractor groups to assist them in competing for some of the construction work to be awarded on this project.

The existing Florida Avenue bridge (vehicular and railroad) has been assumed in our studies to be replaced by others. The vehicular bridge is scheduled to be replaced by the State of Louisiana. Efforts are underway to coordinate with the City of New Orleans and St. Bernard Parish for construction of a new bridge (not necessarily a high-rise) at Florida Avenue. The railroad bridge has been approved for replacement under Truman Hobbs authority. The Coast Guard recommended that the existing railroad bridge is a hazard to navigation, thereby justifying the use of Truman Hobbs. The Port of New Orleans is responsible for the design and replacement of the railroad bridge, and construction has been initiated.

The Senate Report accompanying the Fiscal Year 1994 Energy and Water Development Appropriations Act included language recommending examination of all alternatives for removing the siphon near Florida Avenue bridge, the convening of all interests to determine the best course of action and preparation of a report on this matter. The Evaluation Report assumes that the siphon will be removed prior to initiating construction of this project, at no cost to the Federal Government. Section 305 of H.R. 4422, the House version of the Fiscal Year 1995 Coast Guard Authorization Bill, states that the removal of the siphon, an appurtenant structure to the bridge, will be accomplished under the provisions of the Truman Hobbs Act.

The Fiscal Year 2002, Energy and Water Development Appropriations Act included direction to work with the Old Arabi Neighborhood Association, Regional Planning Commission, St. Bernard Parish, the Louisiana Department of Transportation and Development, and the U.S. Coast Guard to determine if the project will cause vehicular traffic problems and on solutions to any confirmed problems. Contracts have been awarded for preliminary designs for tunnels at Claiborne and St. Claude Avenue and a new mid-rise bridge at Claiborne Avenue to determine if these are viable solutions. The Regional Planning Commission is updating their traffic projections for the entire metro area to reflect the new census data and that will be used for this re-analysis. This re-analysis will be based on traffic projects for the entire metro area being updated by the Regional Planning Commission to reflect the new census data.



Mississippi Valley Division

**New Orleans District** 

Inner Harbor Navigation Canal Lock, Louisiana

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: J. Bennett Johnston Waterway - Mississippi River to Shreveport, Louisiana (Continuing)

LOCATION: The project is located in central and northwest Louisiana and provides a navigation route from the Mississippi River at its juncture with Old River via Old and Red Rivers to Shreveport, Louisiana. The effected parishes and counties for this project include (Louisiana) Caddo, Bossier, Webster, De Soto, Red River, Bienville, Lincoln, Winn, Natchitoches, La Salle, Grant, Rapides, Avoyelles, Concordia; and (Arkansas) Hempstead, Miller, Nevada, Lafayette, and Columbia.

DESCRIPTION: The project provides for a 9- by 200-foot navigation channel extending about 236 miles from the Mississippi River through Old River and Red River to the vicinity of Shreveport, Louisiana. Five locks with dimensions of 84 by 705 by 14 feet and adjacent dams provide a lift of about 141 feet. The project also provides for realigning the channel by means of dredging, cutoffs, and training works and for stabilizing its banks by means of revetments, dikes, and other methods. Recreation facilities and fish and wildlife development are also an integral part of the project. The major unprogrammed work includes recreation sites, and continued acquisition of mitigation lands. This project is part of the J. Bennett Johnston Waterway, Louisiana, Texas, Arkansas, and Oklahoma, which also includes the Shreveport, to Daingerfield, Texas (navigation), Shreveport, Louisiana, to Index, Arkansas (bank stabilization), and Index, Arkansas, to Denison Dam (bank stabilization) reaches.

AUTHORIZATION: River and Harbor Act of 1968, Water Resources Development Act of 1976, Supplemental Appropriations Act of 1984, Water Resources Development Acts of 1986, 1988, 1990, 1992, 1996, and 2000 and Energy and Water Development Appropriations Act of 1994.

REMAINING BENEFIT - REMAINING COST RATIO: 9.1 to 1 at 3-1/4 percent.

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 3-1/4 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 3-1/4 percent (FY 1973).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Reevaluation Report and Final Supplement No. 2 to the Environmental Impact Statement, at 1982 price levels, approved 4 January 1984. Costs for current analysis are based on October 2001 costs deflated to October 1982 price levels.

### SUMMARIZED FINANCIAL DATA

Estimated Federal Cost (COE)  Programmed Construction  Unprogrammed Construction	\$1,852,792,000 48,164,000	\$1,900,956,000
Estimated Apprn Requirements (U.S. Coast G Programmed Construction Unprogrammed Construction	Guard) 587,000 0	587,000
Estimated Non-Federal Cost Programmed Construction Cash Contributions \$20,867,00 Other Costs 36,683,00		92,632,000
Unprogrammed Construction Cash Contributions 14,734,00 Other Costs 20,348,00		

## PHYSICAL DATA

Lands and Damages: 26,000 acres, mitigation of

wildlife losses above mile 104

Channels and Canals: Channel 9 feet deep, 200 feet wide, and 236 miles long from

Old River to Shreveport, Louisiana. Total length of

bank protection - 273 miles

Locks: Number - 5; Size - 84 by 705 feet Dams: Number - 5; Type - Tainter Gated Relocations: Roads (Modify one bridge)

Railroads (Replace one and modify

one bridge)

**PHYSICAL** STATUS **PERCENT** COMPLETION (1 January 2002) COMPLETE **SCHEDULED** Sep 2012 <sup>1</sup> 90 **Entire Project** Open to 9-Foot Navigation Dec 87 Lindy Boggs Lock & Dam Dec 87 John H. Overton Lock and Dam Dec 87 Dec 91 <sup>2</sup> Lock and Dam No. 3 Russell B. Long Lock and Dam Dec 94 Joe D. Waggonner, Jr., Lock and Dam Dec 94

<sup>&</sup>lt;sup>1</sup> For Programmed work only.

<sup>&</sup>lt;sup>2</sup> Initial interim pool impounded.

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT OF EST FED COST
Total Estimated Programmed Construction Cost Total Estimated Unprogrammed Construction Cost Total Estimated Project Cost	\$1,910,929,000 83,246,000 1,994,175,000	
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocations for FY 2002 Allocations through FY 2002	1,732,722,000 20,000,000 16,803,000 <sup>2</sup> 1,749,525,000 <sup>1</sup>	92
Allocation Requested for FY 2003 Programmed Balance to Complete After FY 2003 Unprogrammed Balance to Complete After FY 2003	11,016,000 92,251,000 48,164,000	93

<sup>&</sup>lt;sup>1</sup> Includes \$26,654,000 for John H. Overton Lock and Dam and \$21,653,000 for Red River Emergency Bank Protection for construction work.

 $<sup>^{2}</sup>$  Reflects \$3,197,000 reduction assigned as savings and slippage.

JUSTIFICATION: The Red River is a very erratic river, subject to wide fluctuations in stage and meandering because of the erodible soils. For navigation to become a reality on Red River, a system of dependable pools and a properly aligned channel are necessary. The pools are provided by five locks and dams and the proper alignment is provided by bank and channel stabilization works. These works improve water quality, fish and wildlife habitat, and preserve lands. On 31 December 1994, a 9-foot-deep by 200-foot-wide navigation channel was opened from the Mississippi River to Shreveport. The channel provides dependable 9-foot navigation depths year-round.

Navigation from the Mississippi River to Shreveport provides an artery for low-cost transportation which stimulates economic growth of the region. Estimated savings are based on an average annual movement, as forecast, of 7,845,000 tons by year. 1998 waterborne commerce tonnage on the waterway was 3,749,000 tons including all commodities that transited any portion of the system and approximately 4,000,000 tons were moved on the waterway in 2000. Commodities carried over the waterway include iron and steel products and pipe, industrial chemicals, paper and allied paper products, petroleum and petroleum products, other metals and ores, sulphur, agricultural chemicals, and grain. The public will realize an average annual savings of \$68,831,000 which will result from reduced transportation costs. Several local entities are actively involved in port development on the waterway. The city of Alexandria has constructed port facilities in Pool 2 for use by industry. The Natchitoches Parish Port in Pool 3 was opened in 1996, and a chip loading facility, general cargo dock and transit shed has been constructed at the port. The Caddo-Bossier Port in Pool 5 was opened in April 1997 with 209,000 tons shipped that year. Commodity movements through the port is steadily increasing. Red River Parish has also initiated actions to develop a port site in Pool 4. These ports will be able to accommodate tows or barges of various sizes. The usable lock dimensions were designed for a configuration of six barges with individual dimensions of 35 by 195 feet and a towboat. Larger grain and petroleum barges can also be expected to call at the ports. The project is credited with benefits derived from transportation savings from use of the waterway, flood control, damages prevented by bank stabilization, security against levee crevasses, fish and wildlife, recreation, area redevelopment, reduced maintenance on existing revetments, reduced sedimentation, irrigation, reduced costs of municipal and industrial water supply, and reduced pumping c

The average annual benefits are as follows:

Annual Benefits	Amount	
Navigation	\$ 68,831,000	
Flood Control	2,037,000	
Bank Stabilization	16,602,000	
Fish and Wildlife	460,000	
Recreation	4,435,000	
Area Redevelopment	14,808,000	
Other:		
Irrigation and reduced costs of municipal		
and industrial water supply	53,000	
Total	\$ 107,226,000	

# FISCAL YEAR 2003: The requested amount will be applied as follows:

### Pools 1-5

Complete: Below Lock & Dam Approach Channel Refinement Grand Ecore Visitor Center Hay Lake Revetments	\$ 745,000 1,053,000 980,000
Subtotal	\$ 2,778,000
Continue: Coushatta Capout & Dikes Shreveport Visitor Center Planning, Engineering and Design Supervision and Administration	2,755,000 2,570,000 1,896,000 1,017,000
Subtotal	\$ 8,238,000
GRAND TOTAL	\$11,016,000

NON-FEDERAL COST: With the exception of the Louisiana-Arkansas Railroad Bridge Relocation and the mitigation element, local interests are required to provide all lands, easements, and rights-of-way, including a proportionate share of the cost of the bridge relocations over existing channels in accordance with the principles of Section 6 of the Bridge Alteration Act (Truman-Hobbs) of 21 June 1940, as amended by the Act of 16 July 1952, 25 percent of the cost of necessary retaining dikes for dredged materials and 50 percent of the total cost of recreation facilities. Non-Federal costs associated with the total project are broken down as follows.

The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas	\$ 37,358,000	\$
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	9,499,000	211,700
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities	43,243,000	1,448,000
Pay 6 percent of the first costs allocated to fish and wildlife and pay 6 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities	527,000 <sup>1</sup>	332,800 <sup>2</sup>
Pay 25 percent of the first cost allocated to retention dikes required for construction and maintenance dredging	2,005,000	31,200
Replacement costs		302,900
Total Non-Federal Costs	\$ 92,632,000	\$ 2,326,600

Annual

<sup>&</sup>lt;sup>1</sup> Since the local sponsor will assume all operation and maintenance costs and this cost will exceed the 6 percent local share, there will be no local requirement toward implementation costs for Loggy Bayou increment. Implementation costs shown are for the Bayou Bodcau increment.

 $<sup>^{2}</sup>$  100 percent of annual management costs for Loggy Bayou and Bayou Bodcau increments.

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction. Non-Federal cost associated with the scheduled portion of the project are broken down as follows:

Lands and Damages	\$ 18,999,000
Utility Relocations	8,101,000
Recreation (Other)	9,659,000
Cash Contribution	9,823,000
Recreation Facilities	(6,312,000)
Bridge Relocations	(1,006,000)
Retaining Dikes	(1,973,000)
Mitigation	(532,000)

Total \$46,582,000

STATUS OF LOCAL COOPERATION: Formal assurances of local cooperation were furnished by the Red River Waterway Commission on 26 February 1969 and accepted on behalf of the United States on 15 April 1969. That agency was formed expressly to provide the local cooperation required for the project and has levied a 2-mill assessment to fulfill its obligations. Amended assurances covering the provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, and the specific written agreement requirements of Section 221 of the Flood Control Act of 1970, Public Law 91-611, were executed by the Red River Waterway Commission on 23 May 1973 and were accepted on behalf of the United States on 14 November 1973. A cost sharing agreement covering nine recreation sites in Pools 1 and 2 was approved by the Deputy Chief of Engineers on 23 July 1985. A Memorandum of Understanding between the Corps and the local sponsor for development of these nine sites was executed in January 1986. A supplement to this cost-sharing agreement was executed in the last quarter of FY 1994 to cover the advance construction of three boat ramps and ancillary facilities in Pools 4 and 5 in FY 1995. In the Conference Report that accompanied the Energy and Water Development Appropriations Act of 1993, Congress directed the Corps of Engineers to prepare a supplement to the recreation master plan to serve as the project document to support the contract for recreation development in Pools 3 to 5. The Project Cooperation Agreement for recreation developments in Pools 3 to 5 was executed in April 2000.

The Red River Waterway Commission agreed by letter dated 6 September 1983 to fulfill all responsibilities of the local sponsor relative to the purchase of wildlife mitigation lands. The Louisiana Department of Wildlife and Fisheries, by letter dated 22 July 1983, agreed to assume operation and maintenance responsibilities for acquired wildlife mitigation lands. Updated letters of agreement covering the mitigation plan as presently conceived (i.e., acquisition of up to 5,000 acres in the vicinity of Loggy Bayou) were furnished by the Red River Waterway Commission and the Louisiana Department of Wildlife and Fisheries on 13 August 1990 and 17 August 1990, respectively. The Local Cooperation Agreement between the Federal Government and the State of Louisiana for the acquisition of up to 5,000 acres of mitigation lands in the vicinity of Stumpy Lake/Swan Lake/Loggy Bayou Wildlife Management Area was executed by the Red River Waterway Commission in May 1993 and by the Assistant Secretary of the Army in June 1993.

The Project Cooperation Agreement covering the acquisition of mitigation lands in the vicinity of the Bayou Bodcau Wildlife Management Area was executed in June 1996.

The Red River Waterway Commission furnished a letter of agreement dated 10 October 1997 supporting additional mitigation lands in Red River and Caddo Parishes that are to be considered adjacent to the Loggy Bayou Wildlife Management Area. These new areas were directed in the Water Resources Development Act of 1996. A report detailing a plan of action to acquire these lands was processed as directed by the legislation. Amendment No. 1 to the June 1993 Loggy Bayou Area Local Cooperation Agreement covering the initial acquisition effort in Caddo Parish was executed by the Red River Waterway Commission and the Assistant Secretary of the Army in October 1999. The Water Resource Development Act of 2000 authorized the acquisition of mitigation lands in any of the parishes that comprise the Red River Waterway District, consisting of Avoyelles, Bossier, Caddo, Grant, Natchitoches, Rapides, and Red River Parishes.

The Red River Waterway Commission is providing its share of the project first costs by furnishing the necessary lands, easements, and rights-of-way, performing utility relocations as needed, and providing cash contributions for recreation facilities, bridge relocations, and retaining dikes. They will contribute their share of retention dike construction for maintenance dredging by cash contribution and they will provide the lands, easements, and rights-of-way for these dikes.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate (Corps of Engineers) of \$1,900,956,000 is an increase of \$5,149,000 from the latest estimate (\$1,895,807,000) presented to Congress (FY 2002). This change includes the following item.

Item	Amount
Price Escalation on Construction Features	\$ 5,149,000
Total	\$ 5,149,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final statement was filed with the Council on Environmental Quality on 11 May 1973. The Environmental Impact Statement is included in the project "Red River Waterway." Supplement No. 1 to the Environmental Impact Statement was prepared for the Mississippi River to Shreveport reach of the J. Bennett Johnston Waterway due to a change in project alignment from the authorizing document, and to include updated environmental information due to a reanalysis and to include results of the ground-water studies. The final Supplement No. 1 was filed with the Council on Environmental Quality on 18 February 1977, and published in the Federal Register on 25 February 1977. A third Environmental Impact Statement (Supplement No. 2) was submitted to the Environmental Protection Agency in final form on 10 November 1983, and the record of decision was signed by the Division Engineer on 4 January 1984.

An Environmental Assessment was prepared for Pool No. 2 to present the results of investigations of the impacts of the 58- and 64-foot elevations. The Environmental Assessment resulted in a Finding of No Significant Impact which allowed a design change from 58- to 64-foot pool elevations. Following review by the public, the Finding of No Significant Impact was signed on 21 April 1982.

An Environmental Assessment of the Loggy Bayou Area mitigation increment has been performed. This area was not included in the original mitigation report. The Environmental Assessment was required to satisfy the National Environmental Policy Act. The Environmental Assessment resulted in a Finding of No Significant Impact, which was signed 11 January 1993. Environmental Assessment's are required to present the impacts associated with the construction of riverside levee protection berms in Pools 3 and 5. The berms are necessary to ensure the integrity of the existing flood control levee system. The Environmental Assessment for the berms in Pool 3 resulted in a Finding of No Significant Impact, which was signed on 16 July 1992. The Environmental Assessment for the berms in Pool 5 also resulted in a Finding of No Significant Impact which was signed on 24 May 1993.

Environmental Assessments were required for the Bayou Bodcau mitigation increment and the Nantachie Lake drawdown structure to satisfy National Environmental Policy Act requirements. The Bayou Bodcau mitigation Environmental Assessment resulted in a Finding of No Significant Impact that was signed on 28 April 1995, and the Nantachie Lake drawdown structure Environmental Assessment was completed in FY 1996, also resulting in a Finding of No Significant Impact. An Environmental Assessment for the mitigation lands to be acquired in Caddo and Red River Parishes will be performed. An assessment of the initial tract in Caddo Parish has been completed, and resulted in a Finding of No Significant Impact that was signed on 23 September 1999.

A Final Environmental Assessment has been prepared covering instream disposal of maintenance dredge material in Pools 3, 4, and 5 in lieu of disposal in contained upland areas. A Finding of No Significant Impact was signed on 19 March 1996.

A Final Environmental Assessment has been prepared covering maintenance dredging of the oxbow lakes designated for preservation in project documentation. The dredging consists of maintaining a 5-foot-deep by 20-foot-wide connection from the river into the oxbow lakes in order to achieve all project benefits. The dredged material will be disposed of instream. A Finding of No Significant Impact was signed 18 November 1997.

An Environmental Assessment and Finding of No Significant Impact are included in Supplement No. 2 to the Recreation Master Plan which presents the revised plan for recreation development in Pools 3, 4, and 5. Supplement No. 2 was approved by the Mississippi River Commission on 1 May 1998. The Finding of No Significant Impact was signed on 6 October 1997. An Environmental Assessment was performed in FY 2000 for the Hampton's Lake Recreation Area that was added to the Pools 3 to 5 Master Plan by August 1999, Supplement No. 3. A Finding of No Significant Impact was signed on 24 May 2000.

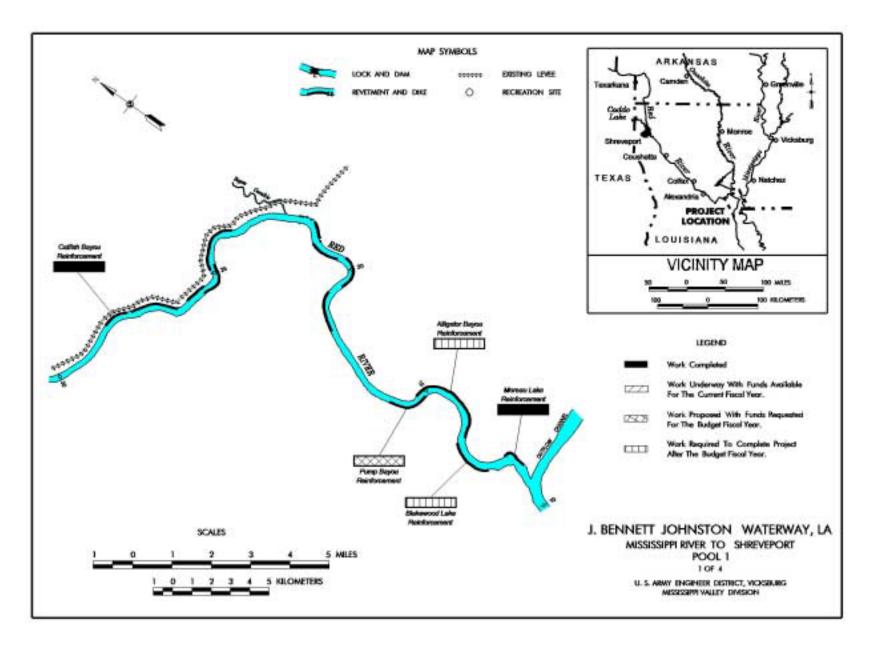
OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1971 and allotted in FY 1972. Funds to initiate construction were appropriated in FY 1973. The scheduled completion date of September 2008 for programmed work is a slippage from the latest completion date presented to Congress of September 2007 (FY 2002) due to funding constraints.

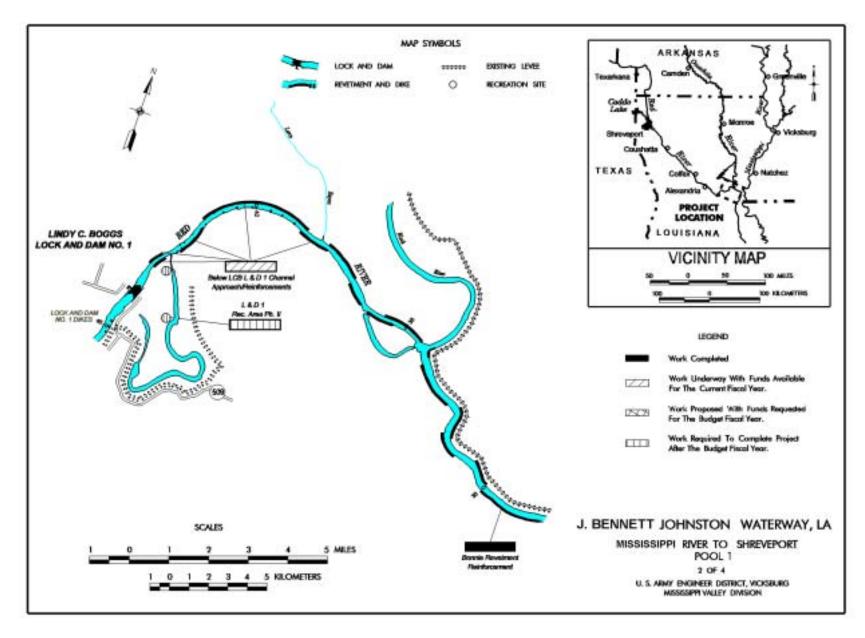
The Energy and Water Development Appropriations Act of 1996 authorized a Regional Visitors Center in the vicinity of Shreveport. The Energy and Water Development Appropriations Act of 1997 provided \$3,000,000 and directions to initiate design and construction of the Regional Visitors Center in FY 1997. The 1997 Appropriations Act also provided funds to initiate design of the previously authorized Project Visitors Center at Grand Ecore. Design for both of the Visitors Centers has been completed, and construction is being initiated in FY 2002. The FY 2001 Appropriations Act (P. L. 106-377) directs the use of available Construction, General funds, in addition to the funds provided by the FY 1997 Appropriations Act, to complete design and construction of the Regional Visitor Center at an estimated cost of \$6,000,000.

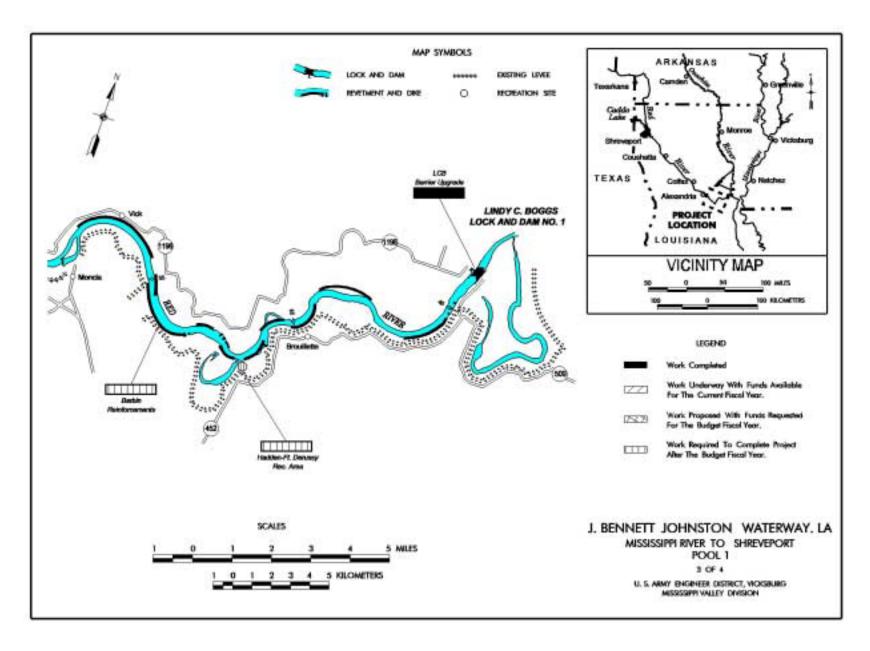
The Draft Master Plan Supplement No. 3 covering adjustments to cost-shared recreation facilities in Pools 3, 4, and 5 was approved by the District Commander in September 1999. The Project Cooperation Agreement covering the same recreation facilities presented in Supplement Nos. 2 and 3 was executed in April 2000.

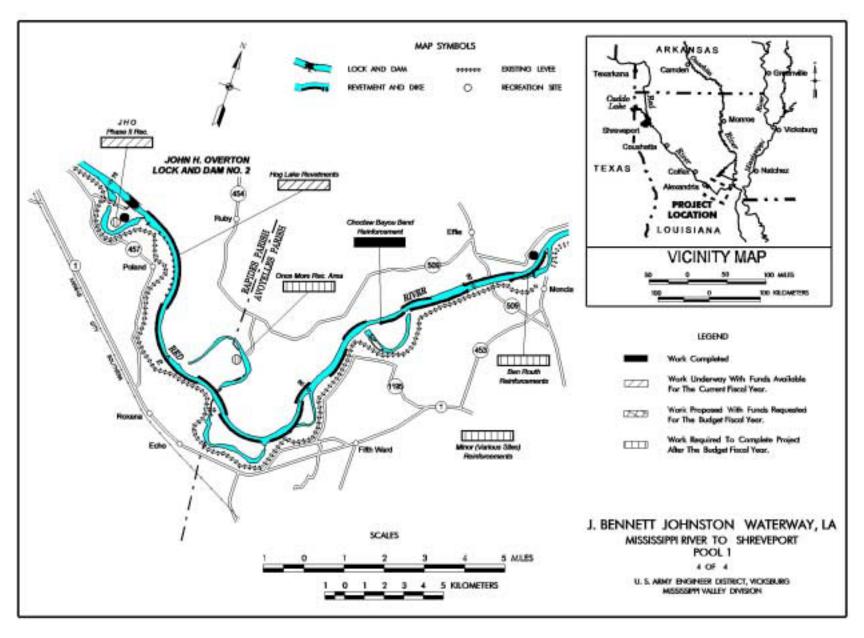
The Water Resources Development Act of 1996 increased the total cost of the Loggy Bayou mitigation increment to \$10,500,000. It further provided that lands that are purchased adjacent to the Loggy Bayou Wildlife Management Area may be located in Caddo Parish or Red River Parish. The Water Resources Development Act of 1996 also modified the waterway project to require the Secretary to dredge or perform other related work as required to reestablish and maintain access to, and the environmental value of, the bendway channels designated for preservation in previous project documentation. Further, this work shall be carried out in accordance with the local cooperation requirements for other navigation features of the project. These project modifications are subject to completion of reports showing the work is technically sound and environmentally and economically acceptable, as applicable. The favorable bendway channel (oxbow lakes) dredging report has been returned by OMB for the development of supplemental environmental data and resubmission, and will be resubmitted in late FY 2001.

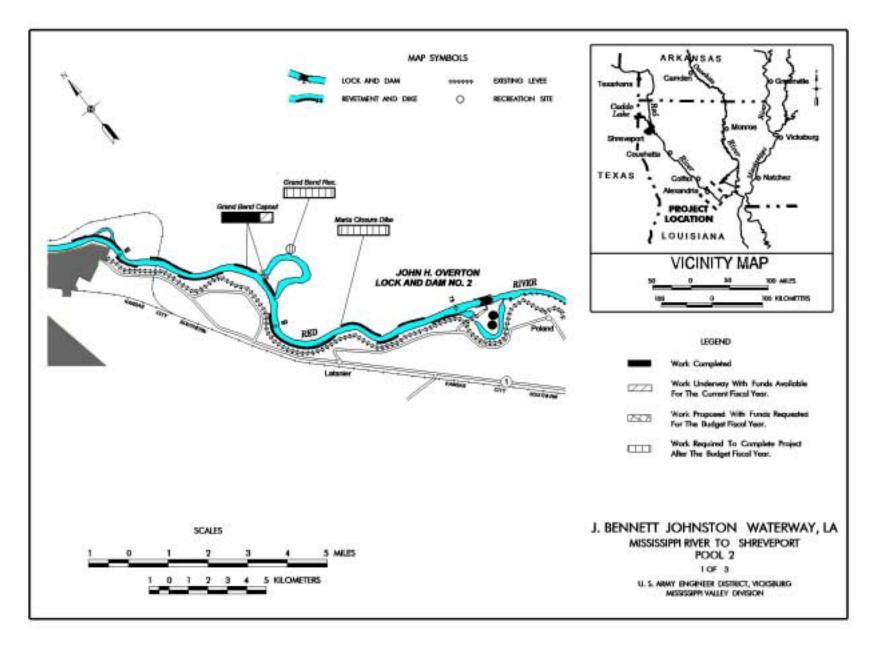
The Water Resources Development Act of 1986, as modified by the Water Resources Development Acts of 1988, 1990 and 2000, and the FY 1990 and FY 1994 Energy and Water Development Appropriations Acts, authorized the wildlife mitigation project for the waterway above mile 104 to Shreveport, Louisiana, at a total cost of \$9,420,000. The Water Resources Development Act of 1990 modifies the mitigation project by authorizing the Secretary of the Army to acquire an additional 12,000 acres adjacent to or close to the Bayou Bodcau Wildlife Management Area. The real estate design memorandums, which present the real estate requirements for the Loggy Bayou area and Bayou Bodcau area mitigation lands, have been approved. A supplemental report, which was submitted prior to passage of the FY 1990 Energy and Water Development Appropriations Act and the Water Resources Development Act of 1990, recommends the acquisition of only 300 acres in the Stumpy Lake area and no lands in the vicinity of the Bayou Bodcau Wildlife Management Area. In the Energy and Water Development Appropriations Act of 1994, the Corps was directed to reimburse the project local sponsor annually for the Federal share of management costs for the Bayou Bodcau mitigation area. The Water Resources Development Act of 2000 modifies the mitigation project by authorizing the purchase of mitigation land from willing sellers in any of the parishes that comprise the Red River Waterway District, consisting of Avoyelles, Bossier, Caddo, Grant, Natchitoches, Rapides, and Red River Parishes.

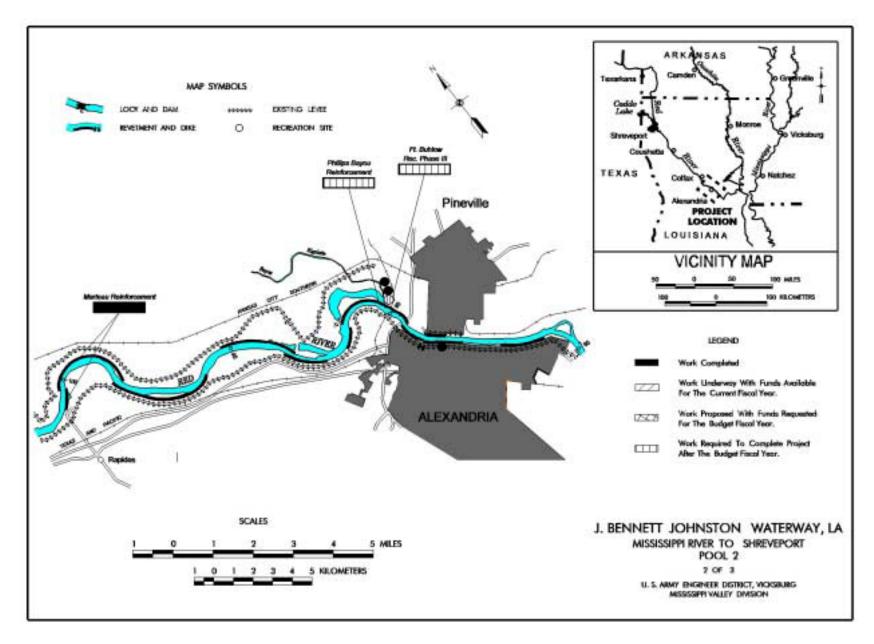


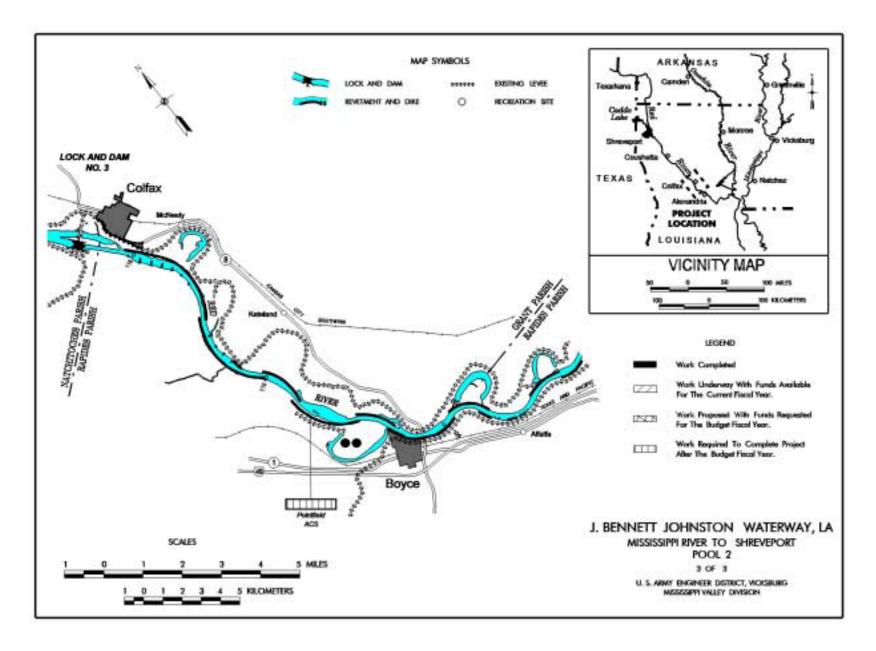


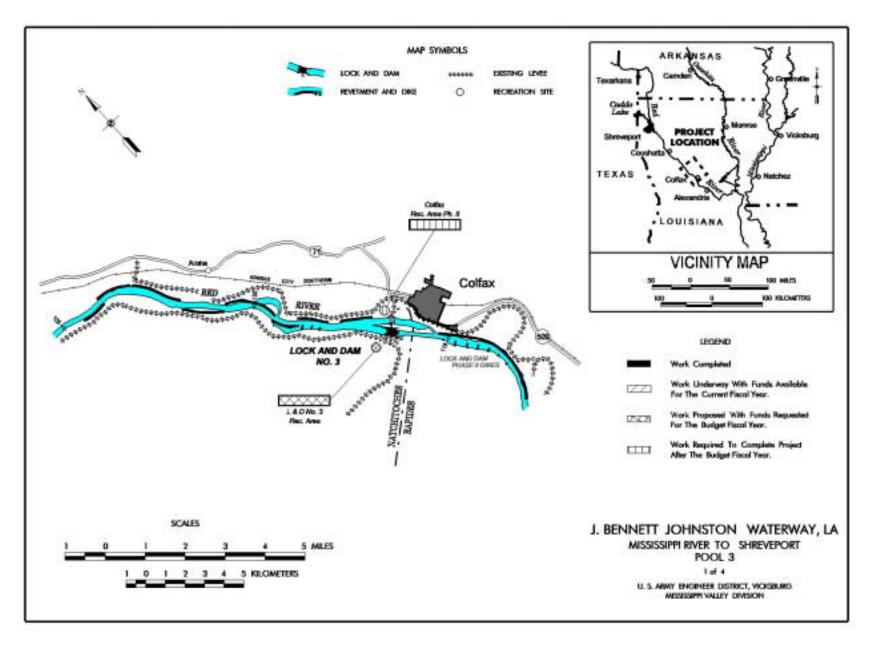


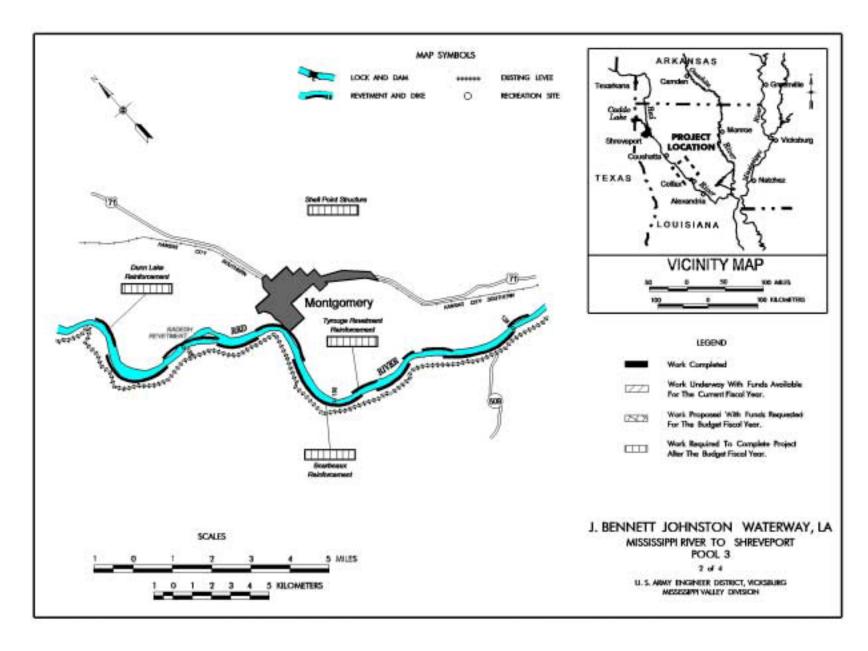


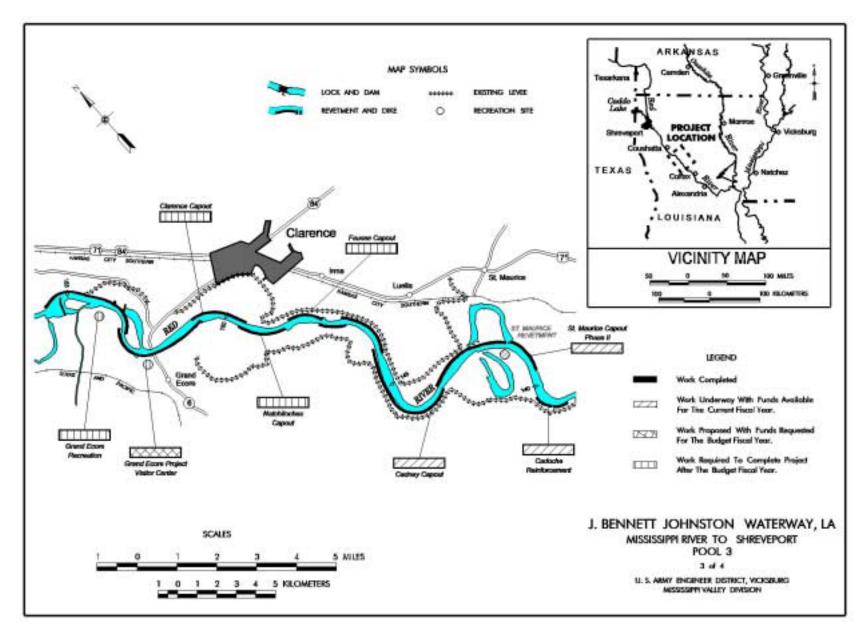


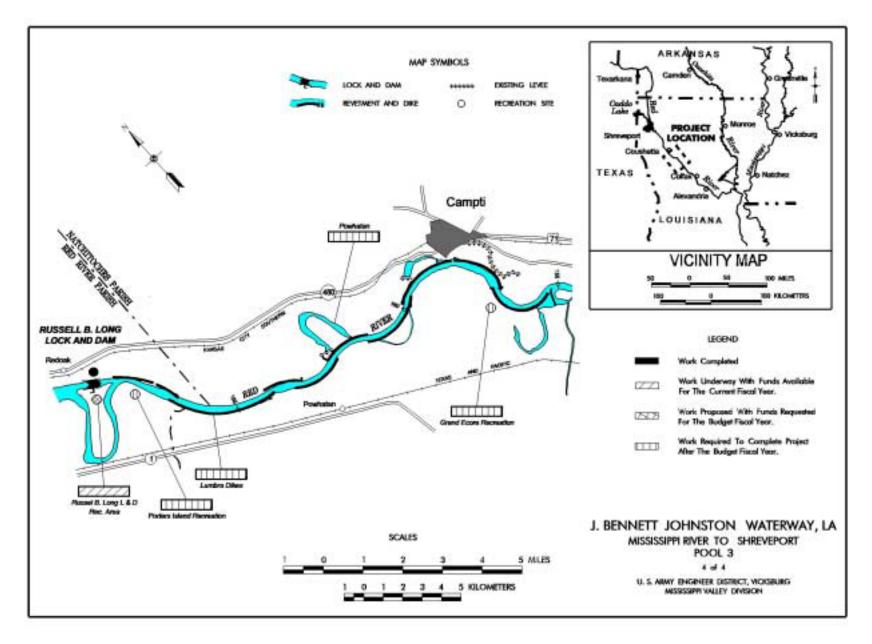


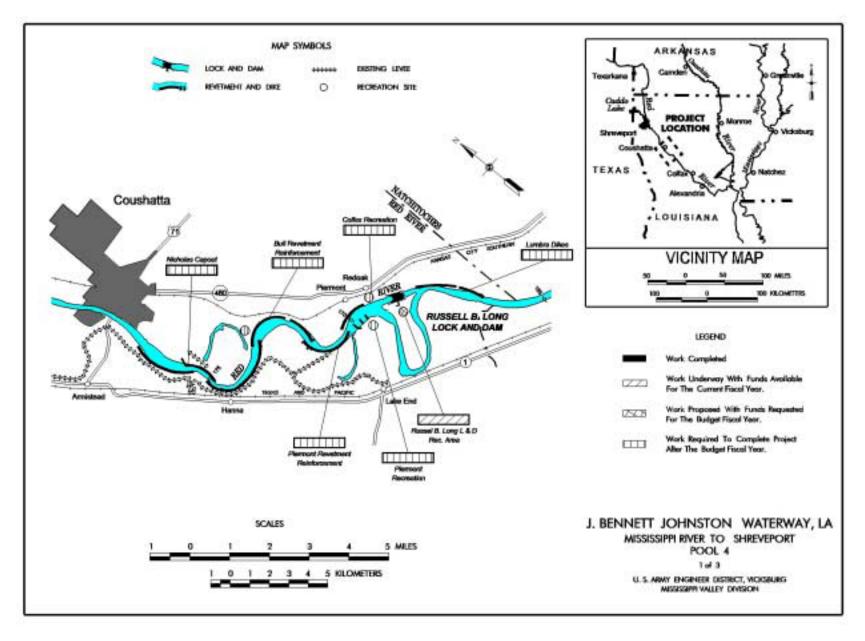


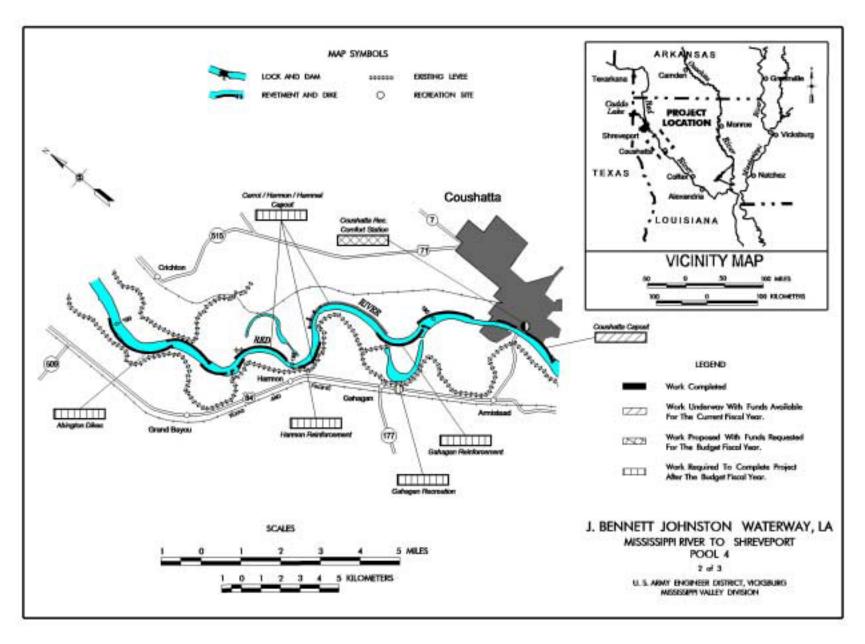


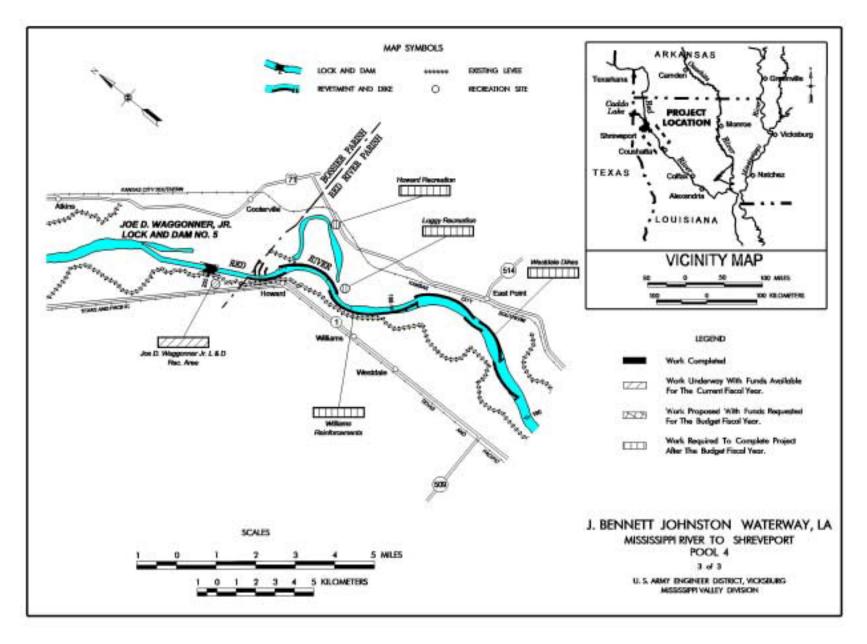


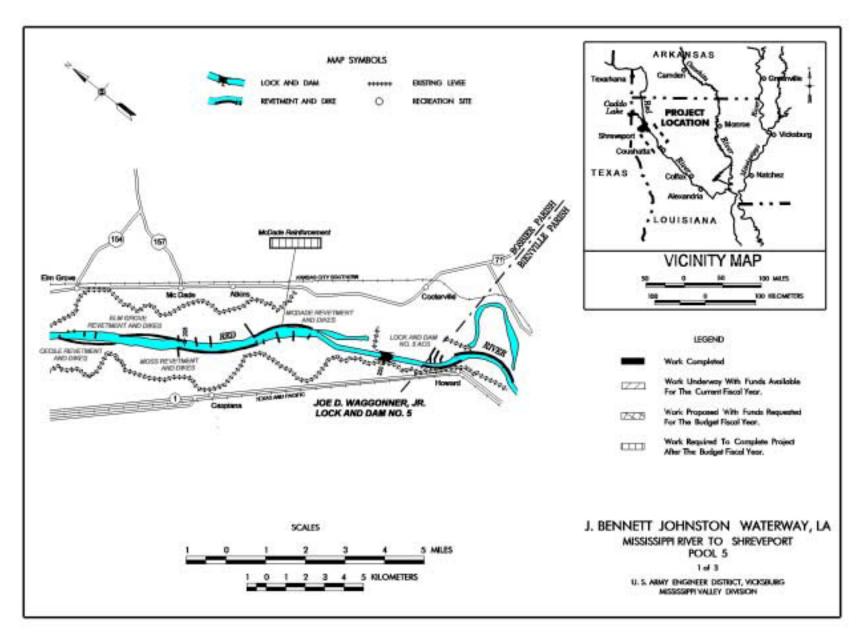


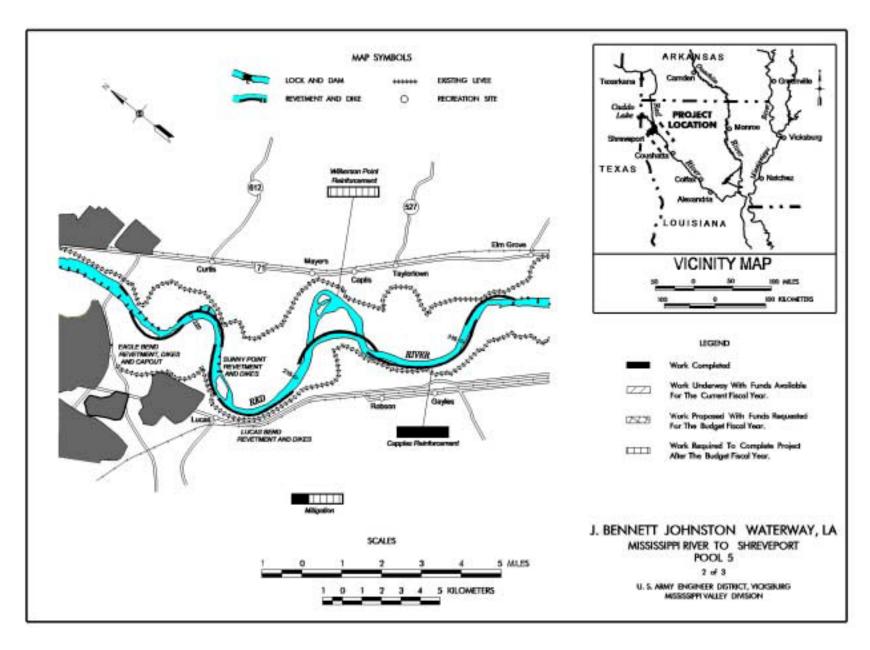


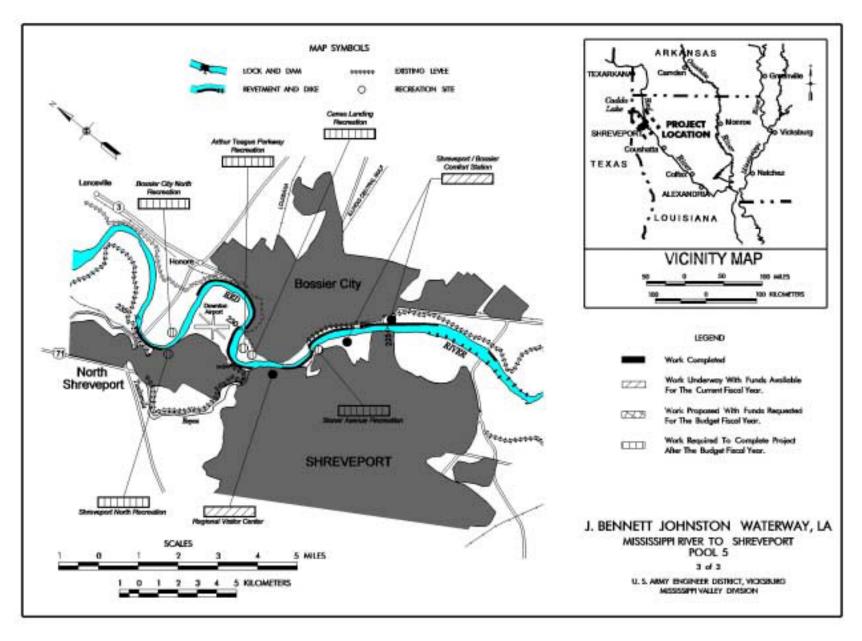












APPROPRIATION TITLE: Construction, General – Local Protection (Flood Control)

PROJECT: East St. Louis, Illinois (Continuing)

LOCATION: The project is located in St. Clair and Madison Counties, Illinois, along the left bank of the Mississippi River between river miles 175 and 195 above the Ohio River.

DESCRIPTION: The project consists of rehabilitation of 21 small gravity drains, 10 large gravity drains (gatewells), 20 closure structures, and 300 relief wells: floodwall and levee rehabilitation work: rehabilitation of 12 pumping stations, 3 drainage control structures, and 6 segments of channel rehabilitation; replacement of 3 bridge structures; and abandonment and removal of 4 bridge structures. All work, except bridges, is programmed. The bridge work, which is unprogrammed, will be performed at 100 percent non-Federal cost.

AUTHORIZATION: Energy and Water Development Appropriations Act of 1988 (PL 100-202).

REMAINING BENEFIT-REMAINING COST RATIO: 16.4 to 1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: 10.3 to 1 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 9.6 to 1 at 8 7/8 percent (FY 1988).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Supplemental Project Report, completed March 1999.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Programmed Construction Unprogrammed Construction	\$38,685,000 0	\$38,685,000		Entire Project	93	Sep 2007
Estimated Non-Federal Cost Programmed Construction Cash Contributions Other Costs Estimated Non-Federal Cost Unprogrammed Construction Other Cost	9,330,000 <sup>1</sup> 3,423,000 3,514,000	16,267,000		PHYSICAL DATA Floodwall & Levee V Small Gravity Drains Large Gravity Drains Closure Structures Relief Wells Pumping Stations	Vork	21 10 20 300 12
Total Estimated Programmed Constr Total Estimated Unprogrammed Con Total Estimated Project Cost Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002		51,438,000 3,514,000 54,952,000 30,422,000 1,000,000 840,000		Drainage Control St Bridge Replacemen Bridge Abandonmer Channels	S	3 3 4 6 segments
Allocations through FY 2002  Allocation Requested for FY 2003  Programmed Balance to Complete A Unprogrammed Balance to Complete		31,262,000 800,000 6,623,000 0	81 83			

Mississippi Valley Division St. Louis District East St. Louis, Illinois

<sup>&</sup>lt;sup>1</sup> A cash contribution of \$12,229,000 is partially offset by a credit of \$1,577,000 for work-in-kind on Harding Ditch Excavation and Clearing, and an estimated credit of \$1,305,000 on Schoenberger Clearing and Excavation, and \$17,000 on Nameoki Ditch.

<sup>&</sup>lt;sup>2</sup> Reflects \$160,000 reduction assigned as savings and slippage.

JUSTIFICATION: The original project, authorized by the Flood Control Act of 1936, provides protection for 85,000 acres of business, industrial and residential areas, including East St. Louis, Granite City, Madison, Venice, Brooklyn, Fairmont and Sauget, Illinois. Urban design flood protection is provided for a Mississippi River flood stage of 52 feet on the St. Louis, Market Street gage. The rehabilitation project was authorized by the Energy and Water Development Appropriations Act of 1988. As a result of failure of a deteriorated roller gate, localized flooding occurred in 1986 causing the evacuation of 1,200 persons and an estimated \$35,000,000 in damages. The need for extensive rehabilitation work was verified during preparation of a General Design Memorandum for the project during Fiscal Year 1990. The extensive rehabilitation work needed is the result of several decades of deferral of required project maintenance due to the limited financial capability of the local sponsor, Metro East Sanitary District. A tax referendum, which was passed in February 1989, provides the Metro East Sanitary District with increased tax revenue necessary to cost share in the rehabilitation project and to perform the necessary maintenance of the project after the rehabilitation is completed. The average annual benefits, all flood control, are \$30,159,000.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue:	\$ 421,000
North and East Pump Stations	337,000
Engineering and Design	42,000
Supervision and Administration	
·	
Total	\$ 800.000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Duri Con and	struction	Annual Operation Maintena Repair, Rehabilita and Replacen Costs	nce, ation,
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$	570,000	\$	
Pay 23.8 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103(m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsor's ability to pay for credit allowed based on section 215 of the Flood Control Act of 1968.	1	5,697,000		
Total Non-Federal Costs	\$ 10	6,267,000	\$	0

Local interests are also required to operate and maintain all works after completion.

STATUS OF LOCAL COOPERATION: The local sponsor, the Metro East Sanitary District, is strongly supportive of the project. A tax referendum passed in February 1989, provided sufficient funds for local sponsorship of the project. Three Project Cooperation Agreements were executed for this project. The Project Cooperation Agreement for the first construction item was executed in November 1989. The second Project Cooperation Agreement was executed on 11 December 1990. The third Project Cooperation Agreement was executed on 11 March 1992. Amendment No. 1 to the third Project Cooperation Agreement, crediting the local sponsor for costs of work-in-kind (Clearing & Excavation of Drainage Channels), was executed on 9 August 1994. Amendment No. 2, executed on 2 September 1997, allows the Corps to award a contract for the previously identified work-in-kind and adds mitigation as a project cost feature. A Third Party Agreement, executed in August 1999 between Metro East Sanitary District and Canteen Creek Drainage District, eliminates the requirement for a fourth Project Cooperation Agreement for this project. The current non-Federal cost estimate of \$16,267,000, which includes a cash contribution of \$9,330,000, is an increase of \$8,663,000 from the non-Federal cost estimate of \$7,604,000 noted in the Project Cooperation Agreement, which included a cash contribution of \$7,062,000. In a financial document dated 19 May 1999, the non-Federal sponsor indicated they are financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COSTS ESTIMATES: The current Federal cost estimate of \$38,685,000 is an increase of \$824,000 from the latest estimate (\$37,861,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	\$344,000 480,000
Total	\$824,000

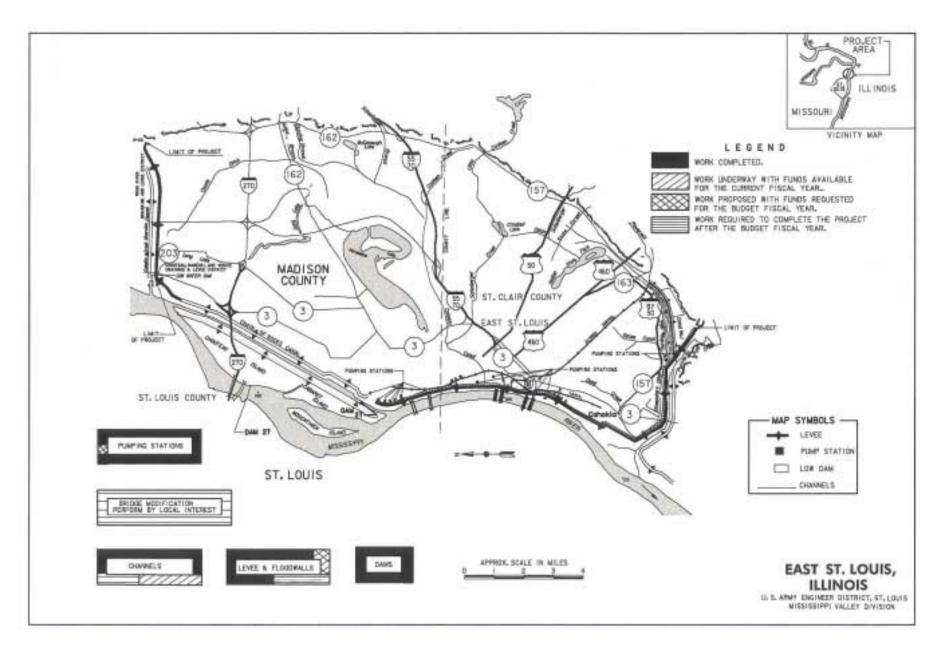
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The project consists of rehabilitation of existing facilities and, for the major part of the project, will not affect environmental conditions except for short-term localized impacts. An environmental assessment and Finding of No Significant Impact was signed by the District Commander on 1 August 1991.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1988.

As a result of the drainage ditch clearing and excavation, mitigation was approved as a project cost per amendment Number 2 to the third Project Cooperation Agreement and was accomplished on project lands.

The scheduled completion date of September 2007 for programmed work is a slippage from the latest completion date of April 2005 presented to Congress (FY 2002). This change is due to constrained funding ceilings.

Fish and Wildlife mitigation costs are estimated to be \$19,000.



4 February 2002 117

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Loves Park, Illinois (Continuing)

LOCATION: Loves Park is located in Winnebago County in north central Illinois, north of the city of Rockford.

DESCRIPTION: The project will provide 100-year protection for a highly urbanized portion of the city of Loves Park along Loves Park Creek. The project will divert excess runoff to detention areas. Floodwaters will be stored until channel stages subside such that the floodwaters may be evacuated from the detention areas. The protective works include 17,900 lineal feet of improved channel, and 3 detention lakes. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 (Public Law 99-662).

REMAINING BENEFIT-REMAINING COST RATIO: 7.6 to 1 at 8-5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.1 to I at 8-5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 8-5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Analysis based on General Design Memorandum dated March 1988.

SUMMARIZED FINANCIAL DATA		STATUS (1 January 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contribution \$ 1,500,000 Other 7,900,000	\$ 21,000,000 9,400,000	Entire Project	65	30 Sep 2005
.,,		PHYSICAL DATA		
Total Estimated Project Cost	\$ 30,400,000	Relocations: Bridges		

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT OF
Allocations to 30 Sep 2001	\$13,641,000	FED COST
Conference Allowance for FY 2002	1,600,000	
Allocation for FY 2002	1,329,000 <sup>1</sup>	
Allocations through FY 2002	14,970,000	71
Allocation Requested for FY 2003	\$2,973,000	85
Programmed Balance to Complete After FY 2003	\$3,057,000	
Unprogrammed Balance to Complete After 2003	0	

JUSTIFICATION: The Loves Park Creek floodplain is dominated by residential neighborhoods, with some concentrations of industrial and commercial development. Flooding problems are caused by intense storms falling over the highly urbanized 7.8-square mile drainage basin of Loves Park Creek. Loves Park Creek, which bisects the city, has inadequate channel capacity and hydraulically inefficient bridges incapable of handling the amount of runoff produced by such storms (it is estimated that a 2-year flood would exceed existing channel capacity). Major floods along Loves Park Creek have been of a flash flood nature and of short duration (less than 1 day). Recent flooding occurred in April 1973, 1975, 1978, and June 1994. The flood of record occurred on April 20, 1973, with damage estimated at \$2,780,000. Damages under present conditions of development are estimated at \$9,060,000 at 1999 price levels. A 100-year flood would cause an estimated \$20,100,000 in damage. Average annual damages caused by flooding along Loves Park Creek are estimated at \$3,552,000 of which over 90 percent are attributable to residential damages. The annual damage and benefit calculations are based on the economic analysis included in the General Design Memorandum for Loves Park, IL, dated March 1988, approved November 1988, and revised September 1989. Average annual benefits, all flood control, are \$3,056,000.

# FISCAL YEAR 2003: The requested amount will be applied as follows:

Lands and Damages Acquisition Expense	\$ 40,000
Continue Construction of Stage I, Channels	2,573,000
Planning, Engineering, and Design	160,000
Supervision and Administration	200,000
Total	\$ 2,973,000

Mississippi Valley Division Rock Island District Loves Park, Illinois

<sup>&</sup>lt;sup>1</sup> Reflects \$256,000 reduction assigned as savings and slippage and \$15,000 reprogrammed from the project.

NON-FEDERAL COSTS: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way	\$4,500,000 <sup>1</sup>	\$
Modify or relocate buildings, utilities, roads bridges (except railroad bridges), and other facilities where necessary in the construction of the project	2,480,000	
In accordance with Assistant Secretary of Army (Civil Works) decision of 17 May 1988, the Government shall apply credit for external compatible work associated with the construction of the Pebble Creek Dam	439,000	
Provide services for Planning, Engineering and Design and Supervision and Administration for relocation work	175,000	
Provide for contingency reserve on lands, easements, and relocations.	306,000	
Pay 5 percent of the cost allocated to flood control in cash to bring the total non-Federal share of flood control costs to 32 percent, and bear all cost of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities	1,500,000	28,000
Total Non-Federal Cost	\$9,400,000	\$28,000

The Non-Federal sponsor has agreed to make required payments concurrently with project construction.

Mississippi Valley Division Rock Island District Loves Park, Illinois

<sup>&</sup>lt;sup>1</sup> Includes \$60,000 in sunk costs by the local sponsor prior to construction.

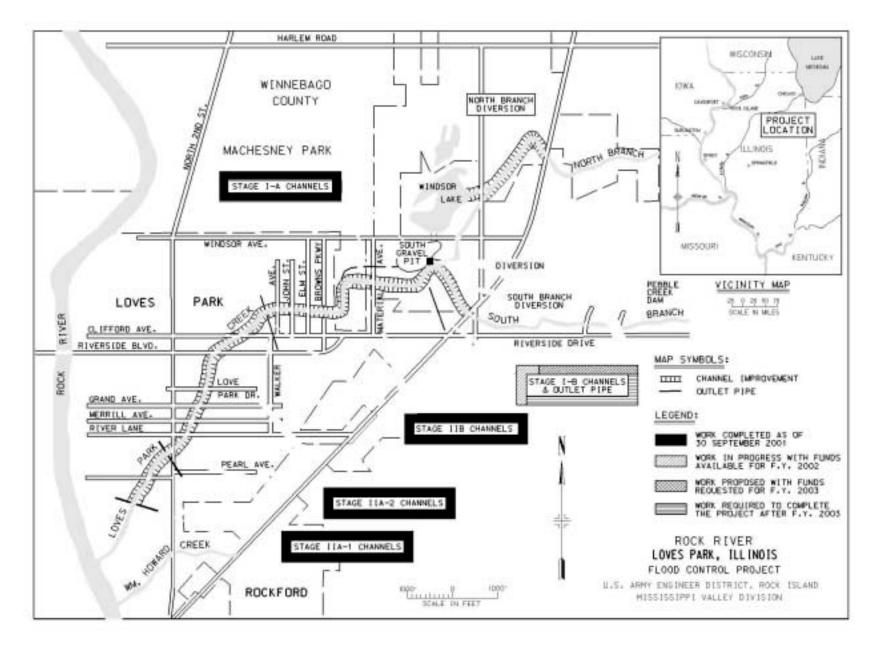
STATUS OF LOCAL COOPERATION: The City of Loves Park, Illinois, is the local sponsor for this project. The Local Cooperation Agreement was executed on 26 March 1991. The State of Illinois has executed an agreement with the city that provides for \$3,550,000 in financial assistance for the project. The current non-Federal cost estimate of \$9,400,000, which includes a cash contribution of \$1,500,000, is a decrease of \$170,000 from the non-Federal cost estimate of \$9,570,000 noted in the Local Cooperation Agreement, which included a cash contribution of \$1,375,000. The non-Federal sponsor is financially capable and willing to contribute the increased non-Federal share.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal Cost Estimate of \$21,000,000 is the same as the last presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was approved by the Council on Environmental Quality on 14 March 1980. In 1985, an Environmental Assessment (EA) was coordinated to address changes to the project incorporated in the General Reevaluation Report, which resulted in a Finding of No Significant Impact (FONSI) that was signed in December 1986. An EA addressing further changes identified in the General Design Memorandum has been prepared and was released for Public Review on 17 July 1990. The review resulted in a FONSI, which was signed on 11 October 1991. With regard to Section 404 requirements, the project is covered under a nationwide permit; however, Section 401, State Certification, was required from the State of Illinois. Certification was received on 24 September 1990.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1985. Funds to initiate construction were appropriated in FY 1990. The scheduled completion date of September 2005 is a slippage from the last date presented to Congress of September 2004 (FY 2002). This slippage is due to funding constraints.

4 February 2002 121



APPROPRIATION TITLE: Construction, General - Flood Control

PROJECT: Comite River Diversion Channel, Louisiana (Continuing)

LOCATION: The Comite River basin comprises approximately 348 square miles and includes portions of Wilkinson and Amite Counties in Mississippi and East Feliciana and East Baton Rouge Parishes in Louisiana. The diversion project is located between the Comite and Mississippi Rivers north of the Town of Baker, Louisiana, and south of the Town of Zachary, Louisiana.

DESCRIPTION: The purpose of the project is to provide flood protection for the residents of the Comite River Basin. The authorized project will reduce stages on the Comite River from the diversion point to the confluence with the Amite River, on the Amite River from the confluence with the Comite River near Denham Springs to Port Vincent, and on Hurricane Creek, Robert Canal, and White's, Cypress and Baton Rouge Bayous. The Comite River is a right bank tributary of the Amite River, with a confluence near the city of Denham Springs, east of Baton Rouge, LA. The project provides for the construction of a 12-mile-long diversion channel located between the Comite and Mississippi Rivers north of the town of Baker, LA and south of the town of Zachary, LA. Included in the project are a diversion structure, a control structure at Lilly Bayou, four drop structures to handle intercepted drainage, three low flow augmentation pumps to supplement flows down stream of the diversion channel, improvements to Bayou Baton Rouge, White Bayou, and Cypress Bayou, and the provision of project mitigation areas. All work is programmed.

AUTHORIZATION: Water Resources Development Acts, of 1992, 1996 and 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 1.5 to 1 at 7-3/8 percent.

TOTAL BENEFIT - COST RATIO: 1.2 to 1 at 7-3/8 percent.

INITAL BENEFIT - COST RATIO: 1.2 to 1 at 7 3/8 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from the design memorandum approved in August 1996 at October 1995 price levels updated to October 2000 price levels.

			ACCUM. PCT. OF EST.	STATUS	PERCENT	PHYSICAL COMPLETION
SUMMARIZED FINANCIAL DATA			FED. COST	(1 January 2002)	COMPLETE	SCHEDULE
Estimated Federal Cost	:	\$108,000,000		Entire Project	0	September 2011
Estimated Non-Federal Cost Cash Contributions \$7,800,000 Other Costs 40,200,000		48,000,000				
Total Estimated Project Cost	9	3156,000,000				
Allocations to 30 September 2001		9,381,000				
Conference Allowance for FY 2002		7,000,000				
Allocation for FY 2002		5,881,000 <sup>1</sup>				
Allocations through FY 2002		15,262,000	14			
Allocation Requested for FY 2003 Programmed Balance to Complete		3,000,000	17			
After FY 2003	9	89,738,000				
Unprogrammed Balance to Complete	7					
After FY 2003						
	PHYSICAL DATA					

CHANNELS AND CANALS: 12 miles.

LEVEES AND FLOODWALLS: An earthen closure will be constructed at Brooks Lake.

PUMPING STATIONS: Three 1.5 cfs

FLOODWAY CONTROL AND DIVERSION STRUCTURES: Comite River Diversion Structure

Lilly Bayou Control Structure

Four drop structures

MITIGATION: 1,484 acres to include planting of trees on 765 acres.

Mississippi Valley Division

**New Orleans District** 

Comite River Diversion Channel, Louisiana

4 February 2002

<sup>&</sup>lt;sup>1</sup> Reflects \$1,119,000 reduction assigned as savings and slippage.

JUSTIFICATION: Flooding within the project area originates from excessive rainfall resulting in headwater and backwater overflow of the Comite River and tributary systems. Between 1973 and 1983, four major floods occurred in the subbasin. The maximum flood of record in the Amite River basin occurred in 1983 and caused approximately \$172,000,000 in damages, (1983 price levels) including \$48,000,000 occurring in the Comite River subbasin. East Baton Rouge Parish experienced \$65,200,000 in damages, with 75 percent occurring in the Comite River subbasin. Flooding up to eight feet above the first floor level was reported with inundation of structures lasting from a few hours to several days. About 55,000 acres of land were flooded and a total of 1,550 urban residences, 20 rural residences and 37 urban businesses were flooded in East Baton Rouge Parish. The total average annual benefits, all flood control, are \$13,250,000.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Compice.	Com	plete:
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Lilly Bayou Control Structure Phase I	\$ 2,325,000
Federal Real Estate	30,000
Planning, Engineering & Design	200,000
Supervision and Administration	445,000
	-,

Total \$ 3,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area.	\$15,850,000	\$
Provide during the period of construction a cash contribution equal to 5 percent of total project cost allocated to flood control.	7,800,000	
Modify or relocate utilities, roads, bridges (except railroad bridges) where necessary for the construction of the project.	24,350,000	
Pay all cost allocated to operation, maintenance, repair, rehabilitation, and replacement of the project features.		539,000
Total Non-Federal Cost	\$48,000,000	\$ 539,000

The non-Federal sponsor has agreed to make all payments of first costs concurrently with project construction.

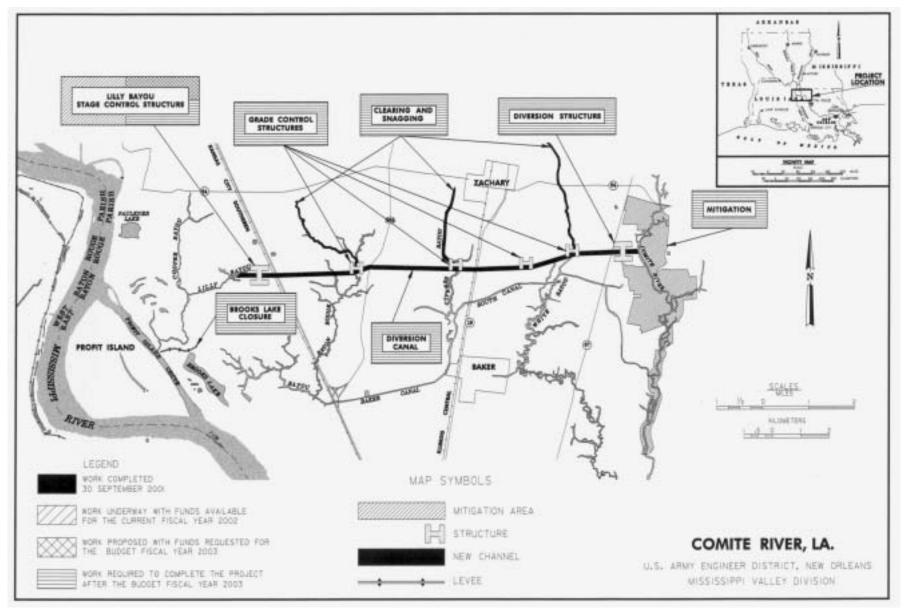
STATUS OF LOCAL COOPERATION: The construction local sponsor is the Louisiana Department of Transportation and Development. The operation and maintenance (O&M) local sponsor is the City/Parish of East Baton Rouge. The Project Cooperation Agreement was signed 1 October 2001.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$108,000,000 is an increase of \$2,000,000 from the latest estimate (\$106,000,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Authorized Modification Price Escalation on Construction Features	\$ 1,000,000 1,000,000
Total	\$ 2,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on April 10, 1991. An Environmental Assessment which documents changes to the authorized project has been completed and a Finding of No Significant Impact was signed on 19 December 1995.

OTHER INFORMATION: Funds to initiate Preconstruction Engineering and Design were appropriated in FY 1991. Funds to initiate construction were appropriated in Fiscal Year 1999. The Water Resources Development Act of 1999, dated 17 August 1999 (PL106-53) Section 371 modified the project to include the costs of highway relocations to be cost shared as a project construction feature.



Mississippi Valley Division

**New Orleans District** 

Comite River Diversion Channel, Louisiana

4 February 2002

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Lake Pontchartrain, Louisiana, and Vicinity (Hurricane Protection)(Continuing)

LOCATION: The project is located in St. Charles, Jefferson, Orleans, St. Bernard and St. Tammany Parishes in southeast Louisiana in the general vicinity of New Orleans, adjacent to Lake Pontchartrain.

DESCRIPTION: The recommended plan consists of a new levee north of US Highway 61, from the east Bonnet Carré Spillway guide levee to the Jefferson-St. Charles Parish boundary; a floodwall along the Jefferson-St. Charles Parish line; an enlarged levee along the Jefferson Parish lakefront; an enlarged New Orleans lakefront levee landward of the seawall including parallel flood protection on the 17th Street, Orleans Avenue, and London Avenue outfall canals; a new and enlarged levee and floodwall along both sides of the Inner Harbor Navigation Canal (IHNC); a new levee and floodwall along the lakefront from the airport to South Point; an enlarged levee from South Point to the Gulf Intracoastal Waterway (GIWW); an enlarged levee and new floodwall along the northside of the Mississippi River-Gulf Outlet (MR-GO) and GIWW; a new levee in the Chalmette area from the IHNC levee along the south bank of the MR-GO to approximately 2-1/2 miles northwest of Verret and west to the Mississippi River levee near Caernarvon; a strengthened Mandeville seawall on the north shore at present height; and a new pumping station and vertical lift gates for the Florida Avenue Complex. The parallel protection work for Orleans and London Avenue Outfall canals is unprogrammed after FY 2002

AUTHORIZATION: Flood Control Act of 1965; Water Resources Development Acts of 1974, 1986, 1990, 1992, 1996, and 2000.

REMAINING BENEFIT TO REMAINING COST RATIO: 3.8 1 at 3-1/8 percent.

TOTAL BENEFIT - COST RATIO: 3.0 to 1 at 3-1/8 percent.

INITIAL BENEFIT-COST RATIO: 17.6 to 1 at 3-1/8 percent (FY 1967).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation dated December 1982 at 1981 price levels.

SUMMARIZED FINANCIAL			4700 000 000	PHYSICAL STATUS PERCENT COMPLETION (1 January 2002) COMPLETE SCHEDULE
Estimated Federal Total Ap			\$533,000,000	
Programmed Construction		\$532,208,000		New Orleans East Unit 90 September 2013
Unprogrammed Construct	tion	792,000		New Orleans West Unit 60 September 2013 Mandeville Unit 100 March 1996 <sup>1</sup>
Future Non-Federal Reimb	ursement		258,000	Chalmette Unit 98 September 2008
Programmed Construction	١	258,000	·	Entire Project 80 September 2013
Unprogrammed Construct		0		,
, , ,				
Estimated Federal Cost (UI	timate)		532,742,000	
Programmed Construction	•	531,950,000	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Unprogrammed Construct		792,000		
empregrammed contact		. 52,555		
Estimated Non-Federal Co	st		212,000,000	
Programmed Construction	ı	201,423,000		
Cash Contribution	\$ 95,934,000			
Other Costs	105,231,000			
Reimbursements:	100,201,000			
Hurricane Protection	258,000			
Traineane i Totection	230,000			
Unprogrammed Construct	tion	10,577,000		
Cash Contribution	10,110,000			
Other Costs	467,000			
Reimbursements	0			

<sup>&</sup>lt;sup>1</sup> Work accomplished by the Fiscal Year 1992 Dire Emergency Supplemental under Appropriation 96x3125, Flood Control and Coastal Emergencies.

## SUMMARIZED FINANCIAL DATA (Continued)

Total Estimated Programmed Construction Cost

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Total Estimated Unprogrammed Construction Cost	11,369,000	
Total Estimated Project Cost	\$745,000,000	
		ACCUM
Allocations to 30 September 2001	425,941,000	PCT OF EST
Conference Allowance for FY 2002	14,250,000	FED COST
Allocation for FY 2002	11,972,000 <sup>1</sup>	
Allocations through FY 2002	437,913,000	82

Allocation Requested for FY 2003 4,900,000
Programmed Balance to Complete after FY 2003 \$89,395,000
Unprogrammed Balance to Complete after FY 2003 \$792,000

#### PHYSICAL DATA

\$733 631 000

83

Drainage Structures: 9

Levees: Average Height: 16 feet

Length: 80 miles

Dam Closures: 2 Floodwalls: 17.9 miles

Pumping Plant: 1 Floodgates: 2

Control Valve Structures: 3

JUSTIFICATION: The lowlands in the Lake Pontchartrain tidal basin are subject to tidal overflow. The Greater New Orleans Metropolitan Area which lies in this basin will continue its rapid economic development in the future years even though severe damages have resulted from several hurricanes in the past years. Hurricane damages result from surges entering Lake Pontchartrain from Lake Borgne through natural tidal passes at the Rigolets and Chef Menteur Passes and the Inner Harbor Navigation Canal. The surges are intensified by local wind effects and the combination of waves and surges causing overtopping of the pre-project protective works along the shores of Lake Pontchartrain. The eastern portion of the area is also subject to flooding by surges and waves that move directly from Lake Borgne and overtop the then existing inadequate protective system seaward of the developed land areas. As a result, residences and industrial and commercial establishments suffer damage, business activities are disrupted, lives are endangered, and hazards to health are created. Hurricanes much more severe than any of record are possible. In the event of the occurrence of such a severe hurricane, catastrophic property damage and loss of human life would be experienced. Local interests have requested protection against these threats to life and property. Hurricane Betsy in September 1965 caused extensive damage

<sup>&</sup>lt;sup>1</sup>Reflects \$2,278,000 reduction assigned as Savings and Slippage.

and flooding of urban areas of the New Orleans area to depths of up to 10 feet. Hurricane Camille occurred in the project area in August 1969 and flooded areas along the Inner Harbor Navigation Canal. Extensive flooding and overtopping of levees would have occurred in the project area in September 1974 if Hurricane Carmen had continued on its predicted course. In 1985 Hurricane Juan caused extensive flooding in the St. Charles Parish area. The Lake Pontchartrain hurricane protection project will provide protection from similar occurrences. The project will provide protection against flooding from the Standard Project Hurricane (SPH). The average annual benefits, all flood control, are \$95,771,000.

# FISCAL YEAR 2003: The requested amount will be applied as follows:

## **NEW ORLEANS EAST UNIT**

Continue:	\$ 503,000
New Orleans Back Levee	20,000
Federal Real Estate Support	20,000
Surveys and Layouts	75,000
Planning, Engineering and Design	75,000
Supervision and Administration	
	\$ 693,000

Subtotal

#### **NEW ORLEANS WEST UNIT**

#### Continue:

\$330,000
1,051,000
404,000
400,000
40,000
52,000
200,000
100,000

Subtotal

\$ 2,577,000

# CHALMETTE UNIT

Complete:	
IHNC to Paris Road	\$ 414,000
Continue:	,
Bayou Bienvenue to Bayou Dupre	642,000
Sta 1121-1560. Final Enlgt	349,000
Initiate and Complete:	
Federal Real Estate Support	15,000
Surveys and Layouts	15,000
Planning, Engineering and Design	120,000
Supervision and Administration	75,000
Subtotal	\$ 1,630,000
Total	\$ 4,900,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1965 and the Water Resources Development Act of 1974, the non-Federal sponsors must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and right-of-ways, and borrow and excavated or dredged material disposal areas.	\$ 43,255,000	\$
Accomplish alterations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	19,916,000	
Pay 30 percent of the total project cost, including the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers, excluding a reimbursement to the Federal Government for costs allocated pursuant to the Water Resources Development Act of 1974.	148,571,000	
Reimburse the Federal Government for costs allocated pursuant to the Water Resources Development Act of 1974.	258,000	
Pay all costs of operations, maintenance, repair, rehabilitation, and replacements of all features of the project works.		1,296,000
Total Non-Federal Costs	\$ 212,000,000	\$1,296,000

Annual

In addition, local interests, through the combined efforts of the State of Louisiana, local levee and drainage districts, and parish police juries, have spent an estimated \$25,366,000 between 1930-1963, based on the best cost records available, to improve and maintain the hurricane protection system existing prior to project authorization. Available costs of record are as follows:

Combination of State of Louisiana and Lake Borgne Levee District and Chalmette Back Levee District on the	
Chalmette Back Levee Protection Systems	\$ 4,410,000
Orleans Levee District	12,010,000
Port of New Orleans (levees along Industrial Canal)	924,000
Pontchartrain Levee District	5,022,000
Fourth Drainage District of Jefferson Parish	3,000,000
Total	\$25,366,000

A very severe hurricane, "Betsy," occurred in the project area in September 1965, just prior to the authorization of the project in October 1965. Considerable damage was done to many of the existing levees, and local interests immediately instituted an accelerated rehabilitation program, with the view of restoring and strengthening existing protection prior to succeeding hurricane seasons. Any work performed by the non-federal interests after project authorization, that conforms to the project design criteria and alignment, is considered as work-in-kind in lieu of a cash contribution.

STATUS OF LOCAL COOPERATION: Assurances are required for the two independently justified plans.

#### 1. Chalmette Area Plan:

- a. Orleans Levee District: New agreements of assurances covering all project cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974 were executed on 30 March 1976. These assurances were accepted on behalf of the United States on 7 December 1977.
- b. St. Bernard Parish Police Jury and Lake Borgne Basin Levee District: New joint agreements of assurances covering all project cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 2 April 1976. These assurances were accepted on behalf of the United States on 7 December 1977.

## 2. High Level Plan:

a. Orleans Levee District: For the Barrier Plan, new agreements of assurances covering all project cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 30 March 1976. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances for the High Level Plan were executed by the local sponsor on 29 May 1985, and accepted by the United States on 21 June 1985.

- b. St. Tammany Parish: The Louisiana Office of Public Works executed an act of assurance dated 8 November 1976, agreeing to fulfill all project cooperation requirements for that portion of the project in St. Tammany Parish. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances for the High Level Plan are required; however, due to failure of the local sponsor to agree to the items of local cooperation, this portion of the project has an indefinite completion date.
- c. Pontchartrain Levee District: New agreements of assurances covering all project cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 20 September 1976. On 8 November 1976, the Louisiana Office of Public Works agreed to lend financial assistance above \$100,000 to the Pontchartrain Levee District for that portion of the Barrier Plan which is the responsibility of that levee district. These assurances were accepted on behalf of the United States on 7 December 1977. Supplemental assurances for the High Level Plan were executed by the Pontchartrain Levee District for the St. Charles Parish portion of the project on 20 April 1987, and accepted on behalf of the United States on 7 August 1987.
- d. East Jefferson Levee District: Supplemental assurances for the High Level Plan were executed by the East Jefferson Levee District for the Jefferson Parish portion of the project on 16 January 1987. A financial plan was received on 25 November 1987, and accepted on behalf of the United States on 21 December 1987. These levees were previously the responsibility of the Pontchartrain Levee District.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$533,000,000 is an increase of \$6,000,000 from the latest estimate (\$527,000,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount	
Price Escalation on Construction Features Authorized Modifications	\$ 3,668,000 2,332,000	
Total	\$ 6,000,000	

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 17 January 1975. By court order dated 30 December 1977, a revised Environmental Impact Statement was ordered. A draft revised Environmental Impact Statement for the High Level Plan and the Reevaluation Report, which documents the proposal to adopt that plan instead of the Barrier Plan, were released to the public and filed with the Environmental Protection Agency on 16 December 1983. The final revised Environmental Impact Statement was filed with the Environmental Protection Agency on 7 December 1984.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1966, and funds to initiate construction were appropriated in Fiscal Year 1967.

The project was initially designed in the 1960s, and a reanalysis was performed for part of the project in the mid-1980s. Continuing coastal land loss and settlement of land in the project area may have impacted the ability of the project to withstand the design storm. Refinement of existing computer models to assist in determining the impact of these environmental changes on the project will continue.

## Authorizations

		Estimated Cost and Year of Price Level
FC Act of 1965 dated 27 October 1965 (PL 89-298) (HD 231/89/1)	A program for protection from hurricane flood levels at New Orleans, LA and surrounding areas by means of levees, floodwalls, control structures, navigation structures, locks, dams and drainage structures.	\$56,235,000 (1961) <sup>1</sup>
Water Resources Development Act of 1974 dated 7 March 1974 (PL 93-251) Section 92	A modification of the FC Act of 1965 (PL 89-298) to provide that non-Federal public bodies may agree to pay the unpaid balance of the cash payment due with interest, in yearly installments.	
Water Resources Development Act of 1986, dated 17 November 1986 (PL 99-662), Section 805	A modification of the project to include construction of a floodwall with sluice gates or other necessary means to ensure that hurricane-flood protection within Jefferson Parish will be unimpaired as a result of any pumping station constructed by local interests.	\$3,500,000 (1985)
Water Resources Development Act of 1990, dated 28 November 1990 (PL 101-640) Section 116(k)	A restudy of and report on project benefits to determine whether or not sponsors have received expected benefits and whether or not there should be a reallocation of costs as a result of any unrealized expected benefits. No non-Federal payment for the St. Bernard Parish portion of project was required during the study period (28 November 1990 - 28 November 1991)	
Water Resources Development Act of 1992, dated 31 October 1992 (PL 102-580) Section 102(j)(2)	A reevaluation of the reallocation of project cost based on the benefit study required by the WRDA 1990 Section 116(k)	

<sup>&</sup>lt;sup>1</sup> This is net cost to the Federal Government. The gross cost is \$60,185,000. The difference is \$3,950,000, which is capitalized value at 3-1/8 percent interest over 100 years for O&M on Rigolets Lock which is to be contributed by local interests and used by the Federal government for project construction.

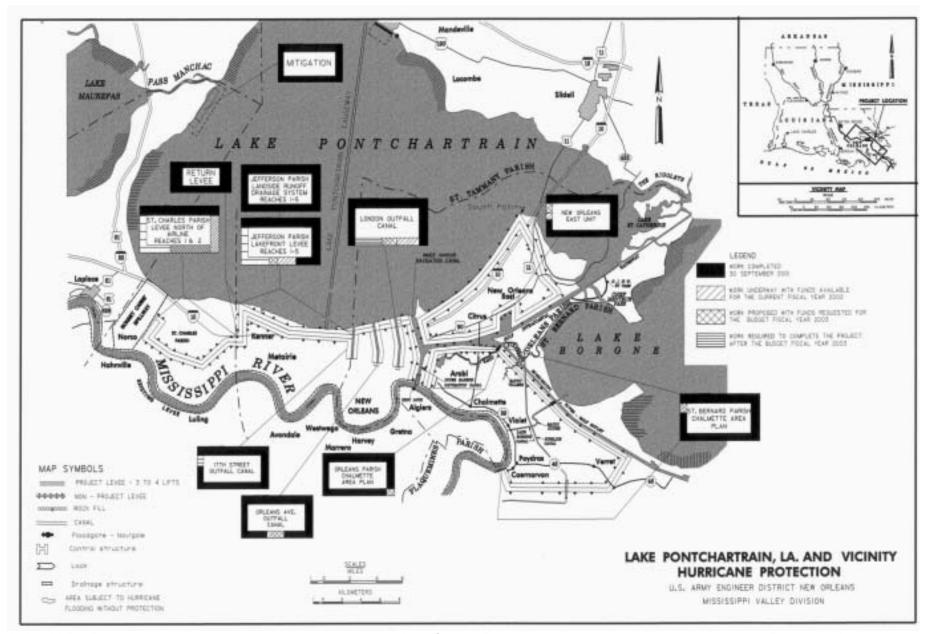
Water Resources Development Act of 1992, dated 31 October 1992 (PL 102-580) Section 102(j)(1) A modification to the project to include conveying landsite runoff from the Jefferson Parish Lakefront levee from the levee right-of-way to the street drainage system.

Water Resources Development Act of 1996, dated 12 October 1996 (PL 104-303) Section 325

A modification to the project to provide that St. Bernard Parish, Louisiana, and the Lake Borgne Basin Levee District, Louisiana, shall not be required to pay the unpaid balance, including interest, of the non-Federal cost-share of the project.

Water Resources Development Act of 2000, dated 11 December 2000 (PL 106-541) Section 432

A post authorization change report to include structural modifications to the seawall providing protection along the south shore of Lake Pontchartrain not later than 180 days after WRDA enactment.



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Larose to Golden Meadow, Louisiana (Hurricane Protection) (Continuing)

LOCATION: The project is located in Lafourche Parish, Louisiana, about 28 miles southwest of New Orleans and about 25 miles inland from the Gulf of Mexico along Bayou Lafourche, south of the Gulf Intracoastal Waterway, extending from Larose to Golden Meadow, a distance of about 16 miles.

DESCRIPTION: The project consists of a ring levee approximately 40 miles in length encircling the areas along Bayou Lafourche from Larose to Golden Meadow and extending approximately 9,800 feet from each side of the bayou. Enlargement of about 3 miles of the existing levee at Golden Meadow and construction of floodgates on Bayou Lafourche at the upper and lower limits of the protection system will be used for navigation and hurricane protection purposes. Approximately 8 miles of low interior levees and eight multi-barrelled culverts controlled by flap gates are needed to regulate intercepted drainage. All work is programmed.

AUTHORIZATION: Flood Control Act of 1965.

REMAINING BENEFIT - REMAINING COST RATIO: 14.0 to 1 at 3-1/4 percent.

TOTAL BENEFIT - COST RATIO: 1.9 to 1 at 3-1/4 percent.

INITIAL BENEFIT - COST RATIO: 1.4 to 1 at 3-1/4 percent (FY 1972).

BASIS OF BENEFIT - COST RATIO: Benefits are based on General Design Memorandum Number 1, and Supplement Number 1, approved 18 May 1973 at 1971 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contribution Other	\$ 6,098,000 28,902,000	\$ 81,000,000 35,000,000		Entire Project	93	September 2007
Total Estimated Project Cost		\$116,000,000				
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002 Allocation Requested for FY 2003		76,018,000 1,500,000 1,260,000 <sup>1</sup> 77,278,000 410,000	95 96			
Programmed Balance to Complete Unprogrammed Balance to Complete		\$ 3,312,000 0				

## PHYSICAL DATA

Levees	Floodgates	Drainage Structures
Loop levee approximately 40 miles in length along both banks of Bayou Lafourche; enlargement of three miles of levees at Golden Meadow; eight miles of low interior levee to regulate intercepted drainage.	2	Eight multi-barreled culverts

JUSTIFICATION: The project area is of great economic importance to the State of Louisiana, and includes lands and improvements having an aggregate value of approximately \$203,904,000 (1995 prices). The population of the area was 20,000 in 1980 and has increased steadily. While oil and gas production, commercial fisheries, and related service industries dominate the economy of the area, there is a wide spectrum of economic activity.

Situated within a region of high hurricane incidence (on the average, two hurricanes threaten the Louisiana coast every three years), the project area is highly vulnerable to overflow from the tidal surges which accompany hurricanes. The highest flood stage during the hurricane of 1915 was 5.5 feet at Golden Meadow, taken from a high-water mark. Should a hurricane similar to that of 1915 move through the area, damages of approximately \$10,962,000 (1995 prices) could be expected. Hurricane Juan (1985) was accompanied by flooding of 6.6 feet, as recorded on the Leeville gauge. Damages sustained during Hurricane Juan were \$35,000,000 and at current prices (1995), \$44,866,000. The flood duration was from two days to one week. Damages began at 3 feet, with significant damages at

<sup>&</sup>lt;sup>1</sup> Reflects \$240,000 reduction assigned as savings and slippage.

4.5 feet. Should a major hurricane approaching the standard project hurricane in intensity move through the area, the entire project area would be submerged in the tidal surge, and monetary damages would likely amount to \$86,811,000 (1995 prices). This damage would include minor crop losses, but the bulk of the damage would consist of physical damage to residential, commercial, and industrial establishments. Residential and commercial facilities are valued at \$52,000,000 (1971 prices), excluding contents, plus \$3,500,000 (1971 prices), or \$207,713,000 (1995 price levels). Average annual damages with the project are negligible (zero), while without the project they are \$14,947,000 (1995 price levels). Flood damages prevented on future developments were determined by projecting future damages at rates equal to the projected population growth and bringing them back to present value by applying a discount rate of 3-1/4 percent. Present values were then amortized for the life of the project to obtain average annual benefits on future damages prevented. The relationship between depth of flooding and percent damage of structures and contents was derived from detailed studies of flood damages in the coastal area of Louisiana for four hurricanes, Carla (1961), Hilda (1964), Betsy (1965) and Camille (1969). These in-depth studies were made for flood insurance rate studies conducted by the U.S. Army Corps of Engineers for the Federal Insurance Administration.

Lafourche Parish has been determined to be an area of "substantial and persistent" unemployment.

The project will provide protection against flooding from hurricanes having a frequency of occurrence of once in 100 years. The average annual benefits are as follows:

	Annual Benefits	Ai	mount
	Flood Control Area Redevelopment	\$ 3,	559,000 24,000
Т	otal	\$ 3,	583,000
FISCAL YEAR 2003: The requested amoun	t will be applied as follows:		
Planning, Engineering and Desig	ŋn	\$	410,000
Total		\$	410,000

Annual Danafita

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1965, the Non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, and rights-of-way, including borrow and dredged material disposal areas (as applicable).	\$ 4,973,000	\$
Accomplish alterations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	\$ 7,966,000	
Pay 30 percent of the total project cost, to include the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers.	\$22,061,000	
Bear all cost of operation and maintenance including replacements.		219,000
Total Non-Federal Cost	\$35,000,000	\$ 219,000

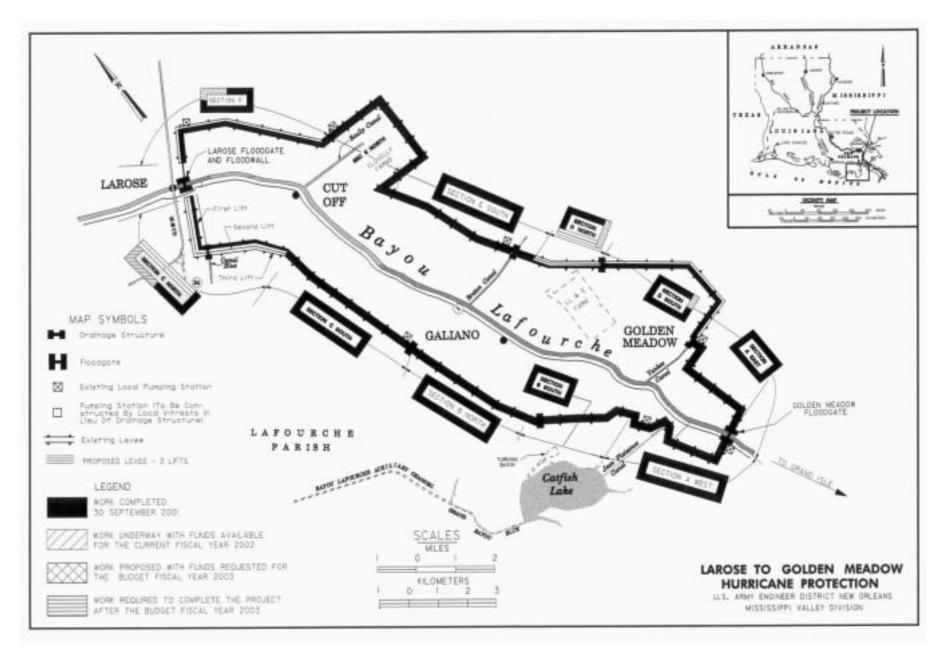
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Assurances covering all requirements of local cooperation were received from the South Lafourche Levee District and accepted on behalf of the United States on 29 August 1973. The South Lafourche Levee District has requested and received funds from the State of Louisiana for rights-of-way acquisition and relocations required to support construction work. In addition to lands and damages and relocations, the South Lafourche Levee District has accomplished levee construction, pumping station and lateral levee construction, and administrative/operating work.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$81,000,000 is the same as last presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 13 May 1974. A draft supplement to the Environmental Impact Statement covering the revised levee alignments, previously unidentified wetland impacts, and necessary mitigation, was filed with the Environmental Protection Agency on 20 July 1984, and the final supplement was filed with the Environmental Protection Agency on 1 March 1985. An Environmental Assessment covering the revised levee alignment for Section D-North was distributed for review on 3 December 1990, and a Finding of No Significant Impact for the revised alignment was signed on 8 March 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1967, and funds to initiate construction were appropriated in Fiscal Year 1972.



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: New Orleans to Venice, Louisiana (Hurricane Protection)(Continuing)

LOCATION: The project is located in Plaquemines Parish, along the east bank of the Mississippi River from Phoenix, Louisiana, approximately 28 miles southeast of New Orleans, Louisiana to Bohemia, Louisiana and from St. Jude, Louisiana, on the west bank approximately 39 miles southeast of New Orleans, Louisiana to Venice, Louisiana.

DESCRIPTION: The recommended plan on the west side of the Mississippi River consists of enlarging approximately 3 miles of existing back levee between St. Jude and City Price, Louisiana; enlarging approximately 13 miles of existing back levee between City Price and Tropical Bend, Louisiana (Reach "A") and installing two 54-inch flap-gated corrugated metal culverts; enlarging approximately 12 miles of existing back levee between Tropical Bend and Fort Jackson, Louisiana (Reach "B-1") and constructing a floodgate at Empire, Louisiana; enlarging approximately 9 miles of existing back levee between Fort Jackson and Venice, Louisiana (Reach "B-2"); and enlarging approximately 34 miles of existing Mississippi River levee from Mile 10 to Mile 44 above Head of Passes (West Bank River Levee). On the east side of the Mississippi River, the recommended plan consists of enlarging approximately 16 miles of existing back levee between Phoenix, and Bohemia, Louisiana (Reach "C") and installing ten flap-gated culverts. All work is programmed.

AUTHORIZATION: Flood Control Act of 1962.

REMAINING BENEFIT-REMAINING COST RATIO: 4.0 to 1 at 2-7/8 percent.

TOTAL BENEFIT-COST RATIO: 2.6 to 1 at 2-7/8 percent.

INITIAL BENEFIT-COST RATIO: 2.4 to 1 at 2-7/8 percent (FY 1964).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in February 1972 at 1971 price levels.

SUMMARIZED FINANCIAL DA	ТА			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 174,00	00,000		St. Jude to City Price	60	Dec 05
Estimated Non-Federal Cost		74,00	00,000		Reach "A" - City Price	99	Oct 12
Cash Contribution	\$29,021,000				To Tropical Bend		
Other	44,979,000				Reach "B-1" – Tropical Bend to Fort Jackson	92	Sep 13
Total Estimated Project Cost		\$ 248,00	00,000		Reach "B-2" – Fort Jackson to Venice	99	Jan 11
					Reach "C" - Phoenix to	90	Feb 08
Allocations to 30 September 20	01	147,07	1,000		Bohemia		
Conference Allowance for Fisca	l Year 2002	2,00	0,000		West Bank River Levee	60	Sep 17
Allocation for Fiscal Year 2002		1,68	30,000 <sup>2</sup>				
Allocation through Fiscal Year 2	002	148,75	51,000	85	Entire Project	80	Sep 17
Allocation Requested for Fiscal	Year 2003	90	0,000	86			
Programmed Balance to Complete					Each reach, when compl	ete, will	
After Fiscal Year 2003		24,34	9,000		provide interim protection	n from	
Unprogrammed Balance to Con	nplete				flooding.		
After Fiscal Year 2003		\$	0				

<sup>&</sup>lt;sup>1</sup> Cost does not include \$505,000 non-Federal work authorized by the Post Authorization Change Report for St. Jude to City Price Levee Enlargement.

<sup>&</sup>lt;sup>2</sup> Reflects \$320,000 reduction assigned as savings and slippage.

## PHYSICAL DATA

Reach	Levees and Floodwalls	Drainage Structure
St. Jude to City Price	Enlarge approximately 3 miles	None
"A" - City Price to Tropical Bend	Enlarge approximately 13 miles	Two 54" flap-gated corrugated metal culverts.
"B-1" - Tropical Bend to Fort Jackson	Enlarge approximately 12 miles	Floodgate at Empire
"B-2" - Fort Jackson to Venice	Enlarge approximately 9 miles	None
"C" - Phoenix to Bohemia	Enlarge approximately 16 miles	Ten flap-gated culverts
West Bank River Levee	Enlarge approximately 34 miles of levee on the Mississippi River west bank from Mile 10 to Mile 44 above Head of Passes.	None

JUSTIFICATION: The project will provide protection from hurricane tidal overflow to a major part of the developed and inhabited area along the Mississippi River delta. Approximately seventy-five percent of the population and seventy percent of the improved lands within the delta are contained in the project area. Hurricanes in the past have caused overtopping of the existing protective works, resulting in extensive damage to structures, industries, other urban and rural developments, crops, and livestock. Evacuation of inhabitants has been required frequently. The most recent storm causing extensive damages, Hurricane Camille, occurred on 17 August 1969. Severe damages were sustained in Reaches B-1 and B-2 (Empire to Venice), and somewhat lesser damages were sustained in Reach A (Port Sulphur to Empire). Estimated flood damages sustained in the project area due to hurricanes are as follows:

Year of Hurricane	Actual Damages Sustained	Damages at Present Value and Conditions of Development
September 1915	\$ 2,325,000	\$164,996,000
September 1956 (Flossy)	1,709,000	16,070,000
September 1957 (Esther)	1,180,000	11,221,000
September 1965 (Betsy)	45,500,000	317,385,000
August 1969 (Camille)	62,500,000	310,875,000
October 1985 (Juan)	46,000,000	70,374,000

The present value and type of property subject to flood damages are as follows:

	Flood of Record	Works Against Design Flood
Number of Acres:		ğ ğ
Agriculture or undeveloped	11,800	11,800
Residential	2,500	2,500
Commercial	600	600
Marshland	0	0
Total	14,900	14,900
Value of Lands and Improvements:	·	·
Lands	\$216,300,000	\$216,300,000
Improvements	\$438,300,000	\$438,300,000
Total	\$654,600,000	\$654,600,000

The back levees are designed for protection against hurricane-generated stages of 100-year frequency. The maximum flood of record on the east side of the Mississippi River occurred in September 1965 (Betsy). On the west side, the maximum flood occurred in August 1969 (Camille). The damages from Hurricane Betsy were \$45,500,000 in 1965 (\$317,385,000 present). The damages from Hurricane Camille were \$62,500,000 in 1969 (\$310,875,000 present).

The duration of flooding within the project area lasted from about three days to several weeks. The most recent flood event was Hurricane Juan in October 1985.

Benefits from the project consist of reduction of flood damage from hurricane tidal overflow caused by overtopping of the existing back levees and land intensification. The average annual benefits are as follows:

Annual Benefits	Amount
Flood Control Mitigation	\$ 14,986,000 13,000
Total	\$ 14,999,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

West Bank River Levees	
Lands and Damages	\$ 5,000
Continue Station 1313+77 - 1793+08, 2 <sup>nd</sup> Enlargement	727,000
Planning, Engineering and Design	68,000
Supervision and Administration	100,000
Total	\$ 900,000

Protection by Authorized

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1962, the non-Federal sponsor must comply with the requirements listed below:

Annual

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Operation, Maintenance, Repair, Rehabilitation and Replacement Cost
Provide lands, easements, and rights-of-way including borrow and dredge material disposal areas.	\$ 9,032,000	\$
Accomplish alterations to roads, pipelines, cables, wharves, oil wells,	5,698,000	
and any other facilities necessary for construction of the project.  Pay 30 percent of the total project cost, to include the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers.	59,270,000	
Bear all costs of operation, maintenance, repair, rehabilitation, and replacement.		885,000
Subtotal Non-Federal Costs	\$74,000,000	\$ 885,000
Bear all of the costs of the construction of the St. Jude to City Price, LA levee enlargement in excess of the cost of the Federal Plan.	505,000 <sup>1</sup>	
Total Non-Federal Costs	\$74,505,000 <sup>1</sup>	\$ 885,000

The Non-Federal sponsor has agreed to make all required payments concurrently with project construction.

In addition, prior to project authorization, local interests expended in excess of \$3,761,000 between 1 April 1926 and 31 December 1959, in the Mississippi River delta area below New Orleans for levees and interior drainage facilities to provide protection against inundation from storm tides.

<sup>&</sup>lt;sup>1</sup> Project cost estimate does not include \$505,000 non-Federal work authorized by the Post Authorization Change Report for St. Jude to City Price Levee Enlargement.

STATUS OF LOCAL COOPERATION: Assurances of local cooperation for Reaches A, B-1, B-2, and C furnished by the Plaquemines Parish Commission Council were accepted on behalf of the United States on 14 April 1965. Supplemental assurances covering provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, furnished by the Plaquemines Parish Commission Council were accepted on behalf of the United States on 20 June 1973. The local sponsor, on 29 December 1987, provided the supplemental assurances of local cooperation for the West Bank River Levee. These assurances were accepted on 28 January 1988. Supplemental assurances of local cooperation for the St. Jude to City Price, Louisiana, levee enlargement were furnished by the Plaquemines Parish Government on 21 December 1992 and were accepted on 18 February 1993.

Local interests have constructed the first and second lifts of Reach C. Based on more detailed planning of construction, a third and fourth lift are required to raise the existing levee to project grade. Credit for equivalent work in lieu of a cash contribution is given upon evaluation of the construction. Local interests have been providing their required cash contributions on schedule to maintain their proportionate share of the project costs.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$174,000,000 is an increase of \$1,000,000 over the last estimate (\$173,000,000) presented to Congress (FY 2002). This change includes the following item:

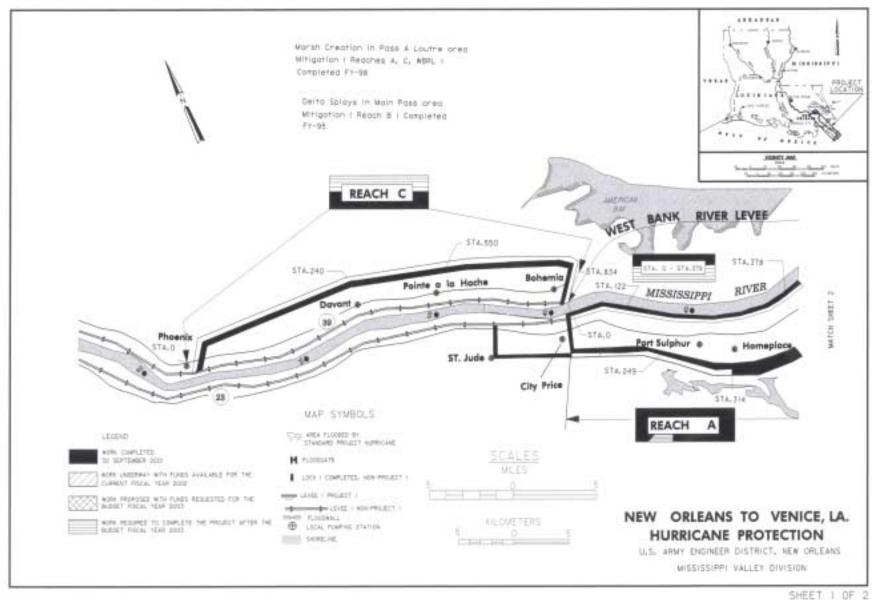
Item	Amount
Price Escalation on Construction Features	\$ 1,000,000
Total	\$ 1,000,000

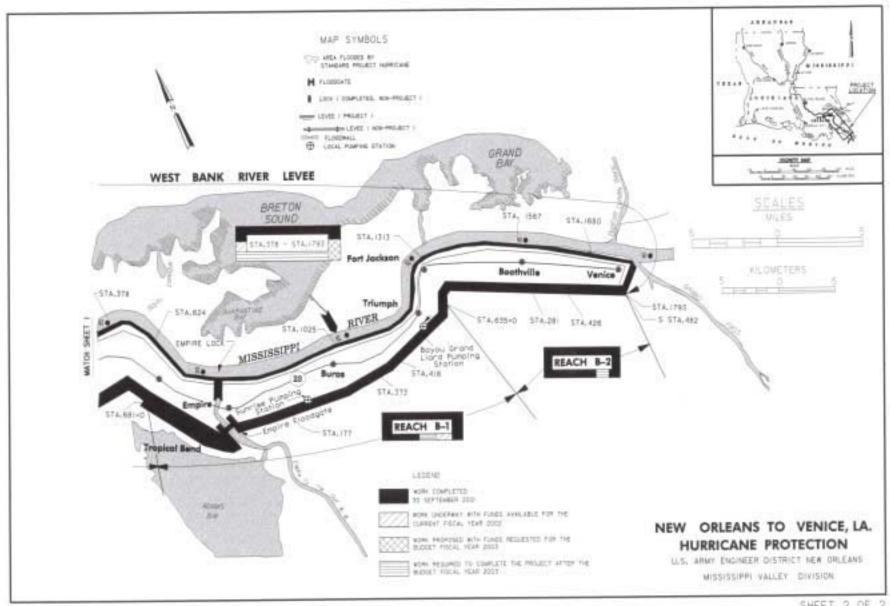
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 24 January 1975; however, during subsequent review, it became apparent that the final Environmental Impact Statement was deficient. A draft Environmental Impact Statement supplement was submitted to the Environmental Protection Agency on 23 March 1984, and the final Environmental Impact Statement supplement with a Section 404 evaluation was filed with the Environmental Protection Agency on 12 April 1985. A draft Supplemental Environmental Impact Statement (Supplement II) for work on the West Bank River Levee was submitted to the Environmental Protection Agency on 5 August 1987, and the final was submitted on 4 December 1987.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1963 and funds to initiate construction were appropriated in Fiscal Year 1964.

The project will impact approximately 3,000 acres of habitat (not including shallow open water). Of the 3,000 acres, 1,103 acres will be mitigated. A mitigation plan has been developed for Reach B that will produce new marsh in the Delta National Wildlife Refuge using delta-splays. Five crevasses in the bank at Main Pass are required for Reach B and have been constructed. A Supplemental Mitigation Plan has been developed to readdress impacts on Reach A and also determine mitigation requirements for Reach C and the West Bank River Levee. Approval of this Supplemental Mitigation Report was received in 1996. This supplemental plan, consisting of creating and preserving marsh, was constructed in 1997.

At the request of Plaquemines Parish, a Post Authorization Change report was prepared to incorporate the area from St. Jude to City Price (an additional 3.3 miles of levee protection) into the project. This area is adjacent to the upstream end of Reach A. Costs for this work are 100 percent non-Federal. Plaquemines Parish wants to include this reach so that flood insurance can be obtained by residents and industry in the area. The lateral levee at City Price, which is currently the upstream terminus of Reach A, will not be constructed. The savings achieved by not constructing the lateral levee and its related relocations will be creditable to the local sponsor. The Post Authorization Change report was submitted to Lower Mississippi Valley Division on 5 February 1992, and was approved 6 March 1992. Proposed supplemental assurances were approved on 10 July 1992. Plaquemines Parish Government executed the supplemental assurances on 21 December 1992 and they were accepted on 18 February 1993.





SHEET 2 OF 2

APPROPRIATION TITLE: Construction, General - Local Protection (Urban Flood Control)

PROJECT: Southeast Louisiana, Louisiana (Continuing)

LOCATION: The project is located in the urban areas of Jefferson, Orleans and St. Tammany parishes in southeast Louisiana. These areas make up the three major urban centers of the New Orleans Metropolitan Statistical Area.

DESCRIPTION: Programmed work includes canal improvements, removal of canal obstructions, and increased pumping capacities in Jefferson and Orleans Parishes. Channel improvement on Mile Branch near Covington, Louisiana, in St. Tammany Parish is unprogrammed.

AUTHORIZATION: Energy and Water Development Appropriations Act, Fiscal Year 1996 (Section 108), and the Water Resources Development Act of 1996 and 1999 (Section 533).

REMAINING BENEFIT - REMAINING COST RATIO: 4.1 to 1 at 7 5/8 percent.

TOTAL BENEFIT - COST RATIO: 2.5 to 1 at 8 percent.

INITIAL BENEFIT - COST RATIO: 2.5 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT - COST RATIO: Benefits are based on the Jefferson and Orleans Parishes, Louisiana, Urban Flood Control and Water Quality Management reconnaissance study dated July 1992 at October 1991 price levels and the Tangipahoa, Tchefuncte, and Tickfaw Rivers reconnaissance study dated June 1991 at October 1990 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contribution Other	79,054,000 86,946,000	\$481,000,000 166,000,000		Jefferson Parish Orleans Parish St. Tammany Parish	73 34	Sep 2007 Sep 2007 Indefinite
Total Estimated Project Cost	00,010,000	\$647,000,000		PHYSICAL D	ATA	
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002		257,212,000 60,000,000 50,410,000		Channel Improvement: Pumping Stations Mod New Pump Stations: 2	ifications: 6	
Allocations through FY 2002		307,622,000	64			
Allocation Requested for FY 2003		20,083,000	68			
Programmed Balance to Complete After FY 2003		105,257,000				
Unprogrammed Balance to Complete	After FY 2003	\$ 48,038,000				

<sup>&</sup>lt;sup>1</sup> Reflects \$9,590,000 reduction assigned as savings and slippage.

JUSTIFICATION: Jefferson, Orleans, and St. Tammany parishes are located in southeast Louisiana. They make up the three major urban centers of the New Orleans Metropolitan Statistical Area. Jefferson Parish has a population of 450,000 (1990). Orleans Parish and the City of New Orleans have coincident boundaries and a population of 500,000 (1990). Jefferson and Orleans Parishes are located in the deltaic plain of the Mississippi River, within the coastal zone of Louisiana. St. Tammany Parish, on the north shore of Lake Pontchartrain, is developing rapidly with a population of 143,000 in 1990, a 30-percent increase since 1980.

Jefferson and Orleans Parishes are bisected by the Mississippi River, creating an east and a west bank area. Generally, the areas near the Mississippi River are above sea level. However, ground elevations decrease with distance from the river and some areas within the levee systems have elevations of as much as nine feet below sea level. Most of the developed areas are protected by levee systems from river and hurricane flooding and drained by pumps which discharge primarily into estuarine water bodies such as Lake Pontchartrain, Barataria Bay, and Lake Borgne.

The leveed areas in Jefferson Parish are divided into three hydrologically distinct basins (East Bank, West Bank - East of Harvey Canal, and West Bank - West of Harvey Canal) that are further subdivided into many sub-basins by natural and man-made barriers. These basins are webbed with canals that terminate at pumping stations. The east bank includes the cities of Kenner and Harahan and unincorporated Metairie. The west bank includes the cities of Westwego and Gretna and the unincorporated communities of Avondale, Bridge City, Marrero, Harvey, Terrytown, and Lafitte.

Orleans Parish is divided into many sub-basins by natural and man-made barriers. These basins are also webbed with canals that terminate at pumping stations. The City of New Orleans makes up an east bank and a west bank basin. The west bank community is commonly referred to as Algiers.

St. Tammany Parish includes the cities of Covington, Slidell, Mandeville, Madisonville, Lacombe, Abita Springs, and other smaller communities. The parish is characterized by gently rolling hills which become flatter in the south near Lake Pontchartrain. A narrow bank of deltaic plain extends along the shore of the lake. Elevations range from 200 feet in the north to near sea level at the lake. The parish is drained by numerous watersheds of varying size. The Pearl River drains an area along the east side of the parish, and backwater flooding from the river occurs in the southeast near Slidell. The remainder of the parish is drained by the Tchefuncte River, Bayou Lacombe, Bayou Bonfouca, and numerous smaller watersheds. Rapid growth, primarily in the southern portion of the parish, has increased rainfall runoff and flooding. The area along the north shore of the lake, including portions of Slidell, Mandeville, Madisonville, and Lacombe, are also subject to flooding from hurricane surges.

Approximately 30 percent of the state's population and 40 percent of the state's economy reside in the three affected parishes which have suffered great flooding losses. Local interests have made substantial improvement to the existing flood control system but are unable to address the major flooding events that continue to plague the Southeast Louisiana area. Flood damages since 1979 are in the billions of dollars. In the extreme rainfall event that occurred in May 1995, more than 24 inches of rain fell into the basin in less than 24 hours. Damages from this one event were approximately \$1.5 billion. The Federal expenditures for this damage recovery are expected to exceed \$500 million. The average annual benefits, all flood control, are \$53,364,000.

## FISCAL YEAR 2003 The requested amount will be applied as follows:

Jefferson Parish		
Lands and Damages	\$	31,000
Complete:		
Whitney Canal		426,000
Soniat – W Nap to Vets	1	,571,000
Suburban at Vets	2	,020,000
Suburban P.S. # 2	1	,798,000
Surveys and Layouts		52,000
Planning, Engineering and Design	1	,129,000
3, 3 11 31 113		670,000
Subtotal		,
	\$ 7	,697,000
Orleans Parish	* .	,,
Lands and Damages	\$	10,000
Continue:	•	.,
Napoleon Ave.	2	,396,000
Hollygrove PH I		,574,000
Claiborne, Jena St. to La. Ave.		,000,000
Dwyer Rd P.S. Addition		,250,000
Hollygrove PH II		,228,000
Complete:	-	,,
Dwyer Canal	1	,680,000
Pritchard P.S.		673,000
Surveys and Layouts		77,000
Planning, Engineering and Design		998,000
Supervision and Administration		500,000
Capor Violon and Administration		000,000
Subtotal	12	,386,000
Total	\$ 20	,083,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, and rights-of-way, including borrow and dredged material disposal areas.	\$ 11,844,000	\$
Accomplish alterations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	\$ 28,643,000	
Bear 25 percent of the total project cost, to include the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project subsequent to the reports cited in the authorizing language.	\$125,513,000	
Bear all costs of operation, maintenance, repair, rehabilitation and replacements of all features of the project		1,592,000
Total Non-Federal Cost	\$166,000,000	\$1,592,000

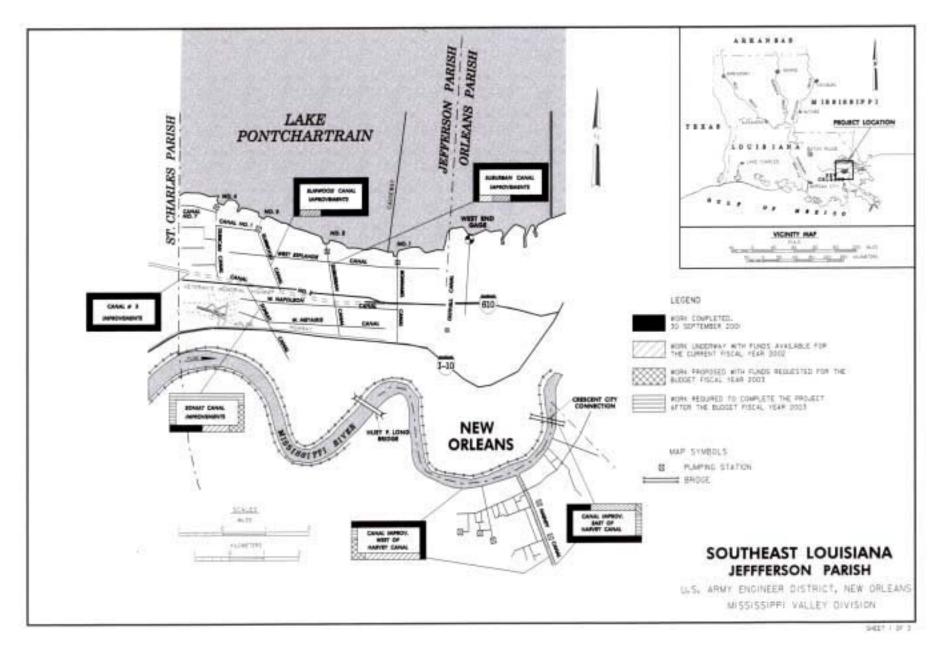
STATUS OF LOCAL COOPERATION: The Project Cooperation Agreements between the Federal Government and Jefferson and Orleans Parishes were executed on January 16, 1997, and January 23, 1997, respectively. The Project Cooperation Agreement for the authorized work in St. Tammany Parish is currently unscheduled. Local interests have accomplished significant work compatible and integral to the project. Actual credit for equivalent work in lieu of cash contributions will be given subject to technical evaluations and audit.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$481,000,000 is an increase of \$31,000,000 from the latest estimate of \$450,000,000 presented to Congress (FY 2002). This change includes the following item:

Item	Amount
Design Changes	\$ 31,000,000
Total	\$ 31,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: All environmental documentation associated with the work planned in Jefferson and Orleans Parishes has been completed. The environmental documentation for work in St. Tammany Parish will be completed prior to initiation of construction.

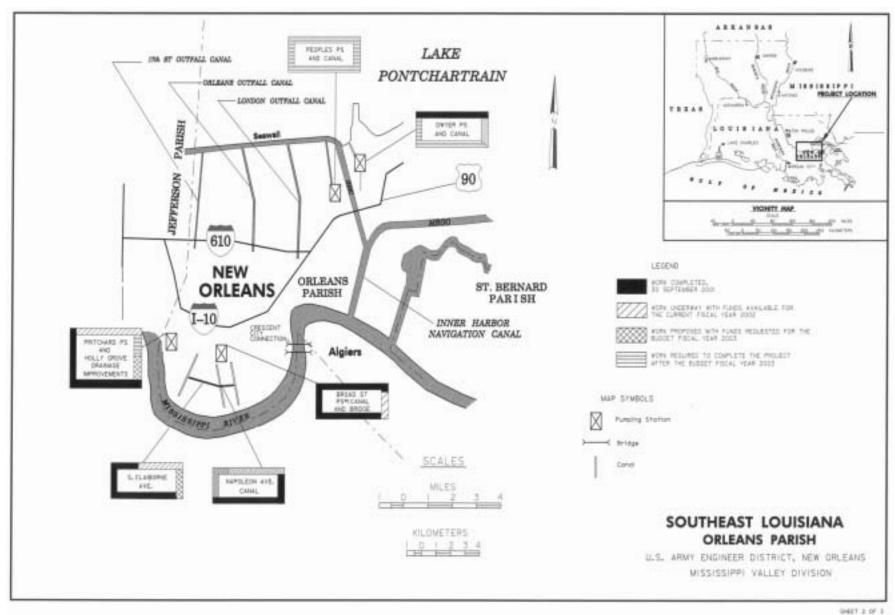
OTHER INFORMATION: Funds to initiate engineering, design and construction were appropriated in Fiscal Year 1996. The total estimated cost for the work described in the reports cited in the authorizing language is \$647,000,000. Construction funds for St. Tammany Parish are not programmed for lack of an approved Technical Report. The City of Slidell has indicated its intent to act as local sponsor for a project within the city limits. A Technical Report is being prepared with completion scheduled for August 2002.

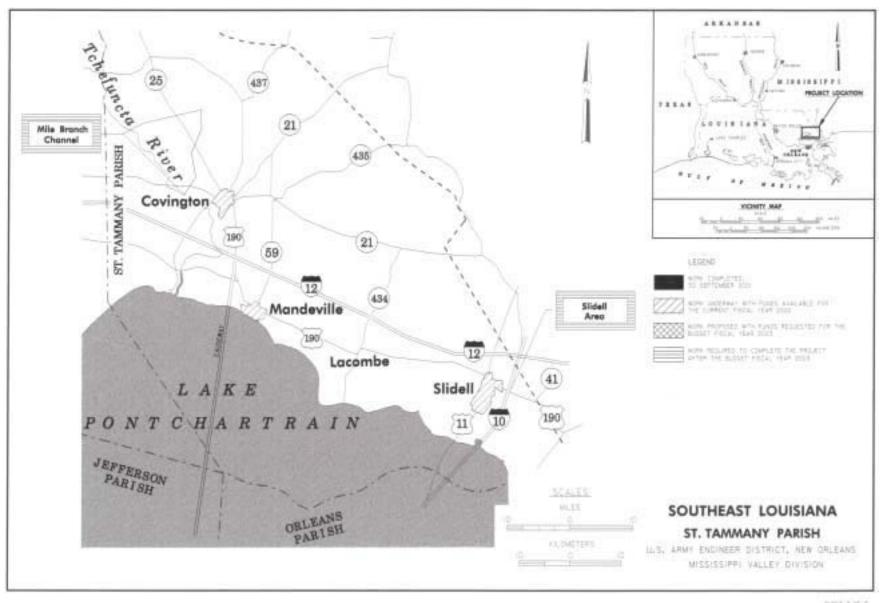


Mississippi Valley Division

**New Orleans District** 

Southeast Louisiana, Louisiana (Urban Flood Control) 160





9407 3 26 3

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: West Bank and Vicinity, New Orleans, LA (Hurricane Protection) (Continuing)

LOCATION: The project is located along the west bank of the Mississippi River in the Vicinity of New Orleans in Jefferson, Orleans and Plaquemines Parishes.

DESCRIPTION: The recommended plan consists of new and enlarged levees along the permitted alignment which generally extends from the St. Charles/Jefferson Parish boundary line east along the existing Lake Cataouatche Levee to the Westwego/Bayou Segnette area, from the Westwego area along the existing V-levee alignment to the vicinity of the old Estelle Pumping Station and along the existing Harvey Canal-Bayou Barataria Levee tying into the floodwall at the Cousins Pump Station, then from the pump station to the navigable sector floodgate complex which is to be constructed in the Harvey Canal near the Cousins Pumping Station. Floodwalls will be used along the levee alignment mentioned above when tying into pumping stations and when land constraints dictate. The plan also provides for the construction of a navigable floodgate in the Harvey Canal just south of Lapalco Boulevard, and the construction of floodwalls along the east bank of the Harvey Canal generally along Peters Road south of Lapalco Boulevard. The existing levees adjacent to Algiers and Hero Canals will be raised, and the levee along the north bank of the Hero Canal will include a wave berm. Mitigation of significant environmental losses to bottomland hardwood and cypress swamp will be accomplished by acquisition of 1,312 acres of high quality wooded lands including wetlands and implementation of measures designed to primarily improve habitat quality. Deferred construction to address future changes in flood stages due to regional subsidence and sea level rise is unprogrammed.

AUTHORIZATION: Water Resources Development Acts of 1986 and 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 5.7 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 3.8 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 3.8 to 1 at 7 1/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available economic analysis provided in the West Bank - East of Harvey Canal Feasibility Report approved in September 1994, updated to October 1998 price levels.

			ACCUM PCT OF EST	STATUS	PCT	PHYSICAL COMPLETION
SUMMARIZED FINANCIAL DATA			FED COST	(1 Jan 2002)	CMPL	SCHEDULE
Estimated Federal Cost		\$203,000,000		Westwego to Harvey	70	Sep 2012
Programmed Construction	\$193,537,000			West of Algiers Canal	0	Sep 2012
Unprogrammed Construction	9,463,000			East of Algiers Canal	3	Sep 2014
				Lake Cataouatche	22	Sep 2014
Estimated Non-Federal Cost		109,000,000		Entire Project	25	Sep 2014 <sup>1</sup>
Programmed Construction	\$103,904,000					
Cash Contribution \$30,636,000 Other 73,268,000				PHYSICAL I	DATA	
Estimated Non-Federal Cost				Westwego to Harvey Can	al Area	
Unprogrammed Construction	\$ 5,096,000			-		
Cash Contribution \$5,096,000				Construct approximately 2	22 miles of levee	and 2 miles of floodwall.
Other 0						
				West of Algiers Canal A	Area	
Total Estimated Programmed Construction	on Cost	297,441,000				
Total Estimated Unprogrammed Constru	ction Cost	14,559,000		Construct approximately 11 miles of levee and 5 miles of		and 5 miles of
Total Estimated Project Cost		312,000,000		floodwalls.		
				Construct a sector floodga	ate in the Harvey	Canal
Allocations to 30 September 2001		65,608,000		Increase capacity of the C	Cousins Pumping	Station
Conference Allowance for FY 2002		12,500,000		and the discharge cha	nnel by 1000 cfs.	
Allocations for FY 2002		10,502,000 <sup>2</sup>				
Allocations through FY 2002		76,110,000	38	East of Algiers Canal A	Area	
Allocation Requested for FY 2003		5,000,000	40			
				Construct approximately	14 miles of levee	and about ½ mile of
Programmed Balance to Complete After	FY 2003	\$112,427,000		Floodwall.		
Unprogrammed Balance to Complete Aft	er FY 2003	\$ 9,463,000				
				Lake Cataouatche Are		
				Construct approximately	10 miles of levee	and 2.5 miles of
				floodwall.		

<sup>&</sup>lt;sup>1</sup> Deferred construction to address future changes in flood stages due to regional subsidence and sea level rise is assumed to occur in 2021.

<sup>&</sup>lt;sup>2</sup> Reflects \$1,998,000 reduction assigned as savings and slippage.

JUSTIFICATION: The project area is generally bounded by the St. Charles/Jefferson Parish line to the west, the Mississippi River to north and east, and Barataria Bay and Lake Salvador to the south. Tidal waters can be carried into the project area through Lakes Cataouatche, Salvador and Barataria Bay which connect to the Gulf of Mexico through Barataria Bay, and into Bayou Segnette, Harvey Canal and Algiers Canal. Fresh water comes into the area from the Mississippi River via the Harvey and Algiers Locks, direct rainfall, and pumpage from leveed areas.

Several hurricanes and tropical storms have passed through or near the project area, including the following major storms: the 1915 hurricane, the 1947 hurricane, and Hurricanes Flossy (1956), Hilda (1964), Betsy (1965), Carmen (1974), Babe (1977), Bob (1979), Danny (1985), Juan (1985), Andrew (1992), and Frances (1998). Hurricane Flossy brought torrential rains and tidal flooding to the project area, with nearby areas recording 16.7 inches of rain in a 24-hour period. Hurricane Hilda raised water levels at Barataria and Lafitte to 3.6 and 4.04 feet National Geodetic Vertical Datum, respectively. Hurricanes Betsy and Carmen also caused flooding to some parts of the project area. Hurricane Juan, generally characteristic of a storm event of approximately 25 years, broke high water records throughout the area, with stages in the Harvey Canal estimated to be the equivalent of a 60-year event. On the west bank, three local levees were breached and several subdivisions were flooded by tidal inundation and the long duration of the high stages. Extensive flooding occurred west of the Harvey Canal. The total precipitation from Hurricane Juan ranged from 8 to 12 inches over the project area. This storm clearly illustrated that the present local levee system is unable to provide protection against a tidal surge. The quick action and massive flood fighting efforts by the West Jefferson Levee District, the Parish of Jefferson, the National Guard, and thousands of volunteers prevented flooding of potentially catastrophic proportions. The project will provide Standard Project Hurricane (SPH) (about a 500-year event) protection to approximately 77,908 acres of mostly urban land with a population of 201,000 (1990 census). The average annual benefits, all flood control, are \$71,199,000.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue:	
Reach 3 Structures (MTK/Ames/Oak Cove F/W)	\$ 561,000
Surveys and Layouts	30,000
Planning, Engineering and Design	50,000
Supervision and Administration	300,000

Planning, Engineering and Design	50,000
Supervision and Administration	300,000
Subtotal	\$ 941,000

West of Algiers	Canal Area
Continue	

Westwego to Harvey Canal Area

Continue:	
Sector Gate (Harvey Canal)	\$ 670,000
Cousins P/S DischChannel/FW/Culvert	800,000
Complete:	
Cousins Pump Sta. Exp. & Front Prot	759,000
Surveys & Layouts	30,000
Lands and Damages	10,000
Planning, Engineering and Design	400,000
Supervision and Administration	800,000

Subtotal

\$3,469,000

East of Algiers Canal Area Surveys & Layouts Lands and Damages Planning, Engineering and Design Supervision and Administration Subtotal	20,000 10,000 100,000 50,000 \$ 180,000
Lake Cataouatche Area Continue: Lk Cataouatche P/S to Segnette St Park Lands and Damages Planning, Engineering and Design Supervision and Administration Subtotal	\$ 200,000 10,000 100,000 100,000 \$ 410,000
Total	\$ 5,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 (PL 99-662), the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights-of-way, and borrow and excavated material disposal areas.	\$ 25,409,000	\$
Accomplish all alterations and relocations to utilities and facilities (other than railroad bridges) necessary for construction of the project.	12,323,000	
Pay 35 percent of the cost allocated to hurricane protection. Funds provided by non-Federal interests for the interim hurricane protection may be considered beneficial expenditures and may be credited as a part of the non-Federal contribution of the project pursuant to the Water Resources Development Act of 1986.	71,268,000	
Bear all costs of operation, maintenance, repair, rehabilitation, and replacement of all features of hurricane protection facilities.		340,900
Total Non-Federal Costs	\$109,000,000	\$ 340,900

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement between the West Jefferson Levee District, previous local sponsor for the project, and the Federal Government was executed on 18 December 1990. Subsequent Memorandum of Agreement between the Louisiana Department of Transportation and Development (LADOTD) and the Federal Government, dated 16 May 1995, designated LADOTD as the project local sponsor. An amended Project Cooperation Agreement between LADOTD and the Federal Government was required for the east and west of the Algiers Canal and Lake Cataouatche area. The amended Project Cooperation Agreement (PCA) was executed 26 April 1999.

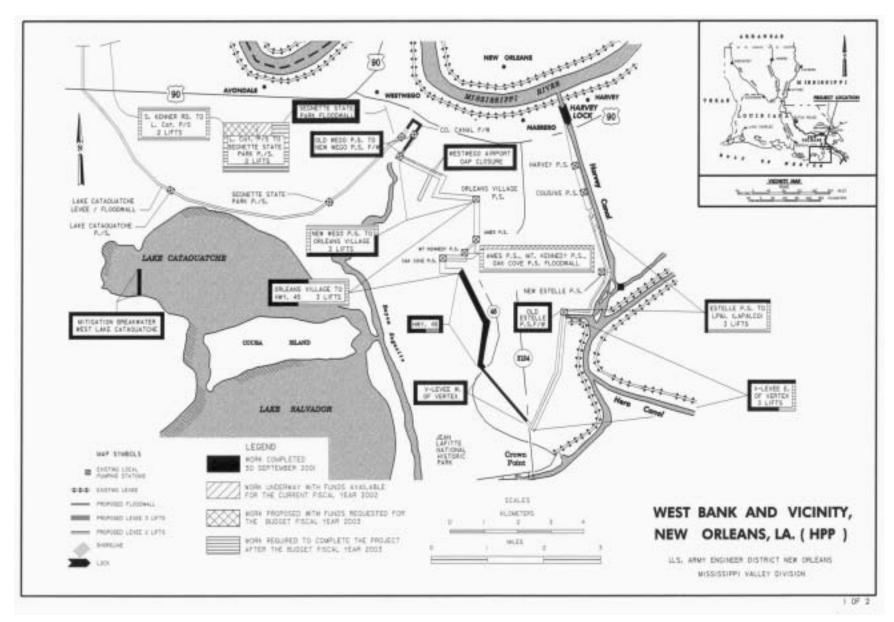
Local interests have accomplished engineering and design work and constructed numerous reaches of levee. Specifically, about \$21,400,000 has been recommended in tentative credit to local interests for work accomplished or to be accomplished, subsequent to project authorization. Actual credit for equivalent work in lieu of cash contribution is given upon verification of engineering and design work and evaluation of the construction.

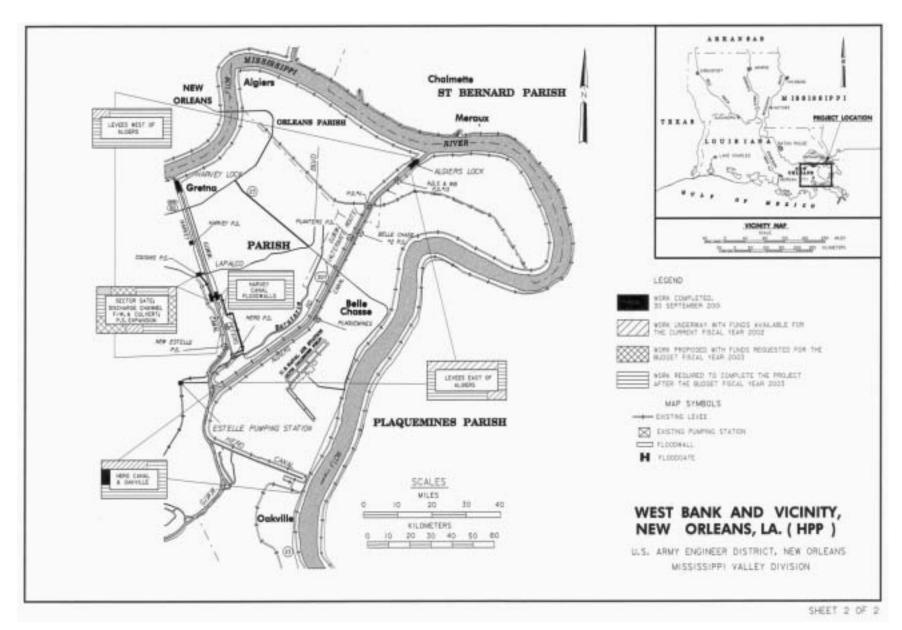
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$203,000,000 is an increase of \$3,000,000 from the latest estimate (\$200,000,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Post Contract Award and Other Estimating Adjustments Price Escalation on Construction Features	\$2,360,000 \$ 640,000
Total	\$3,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement Westwego Area was filed with the Environmental Protection Agency on 23 October 1987. The Record of Decision (ROD) was signed 28 March 1989. Environmental Assessments to address refinements in project design were prepared on 23 February 1990, June 1991, March 1992 and August 1993. A Finding of No Significant Impact (FONSI) was signed by the District Commander in each assessment. The final Environmental Impact Statement for the east and west of the Algiers Canal area was filed with Environmental Protection Agency on 30 September 1994. The ROD for East and West of Algiers Canal and Lake Cataouatche were signed on 28 September 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design for the east and west of the Algiers Canal area were appropriated in Fiscal Year 1995, and funds to initiate construction were appropriated in Fiscal Year 1997. Funds to initiate preconstruction engineering and design for the Westwego Area were appropriated in Fiscal Year 1988 and funds to initiate construction were appropriated in Fiscal Year 1990. Construction was initiated in March 1991. A post authorization change report to expand the scope of this project to include the Lake Cataouatche area was approved in December 1996 and funds to initiate construction were appropriated in FY 1999.





APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Crookston, Minnesota (Continuing)

LOCATION: The city of Crookston is located on the Red Lake River in Polk County in northwestern Minnesota, about 25 miles east of the Minnesota - North Dakota border and about 85 miles south of the Canadian border.

DESCRIPTION: The proposed project consists of two downstream high-flow channels, levees providing protection from the 100-year flood events for the neighborhoods of Woods Addition, Thorndale and Riverside/Downtown, and flood plain management techniques for areas not protected by permanent levees. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1999 (Public Law 106-53).

REMAINING BENEFIT-REMAINING COST RATIO: 4.1 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 6 7/8 percent (FY 2001).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Feasibility Report and Environmental Assessment for Local Flood Control, Crookston, Minnesota dated June 1997 at October 1996 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST		PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$7,090,000		Entire Project	16	Sep 2003
Estimated Non-Federal Cost Cash Contribution	\$1,073,000	3,810,000		PHYSICAL DAT	-A	
Other Total Estimated Project Cost	2,737,000	\$10,900,000		Permanent Leve	ees	1.5 miles
		<b>,</b> , , , , , , , , , , , , , , , , , ,		Channel Cutoffs	;	2
Allocations to 30 September 2001		2,208,000		Road Raise		1
Conference Amount for FY 2002		2,000,000				
Allocation for FY 2002		1,680,000 <sup>1</sup>				
Allocations through FY 2002		3,888,000	55			

<sup>&</sup>lt;sup>1</sup> Reflects \$320,000 reduction assigned as savings and slippage.

Mississippi Valley Division St. Paul District Crookston, Minnesota

4 February 2002 171

SUMMARIZED FINANCIAL DATA (Continued)

ACCUM PCT OF EST FED COST

Allocation Requested for FY 2003 3,202,000 100

Programmed Balance to Complete after FY 2003 0
Unprogrammed Balance to Complete after FY 2003 0

JUSTIFICATION: About 800 Crookston residences are located in flood prone areas of the city. The 1950 flood inundated most of the flood prone properties. However, for subsequent floods in 1965, 1969, and 1979, the city of Crookston had erected levees that together with emergency flood fights prevented major damages to the flood prone residential areas. The local levees at Crookston were not constructed to permanent levee standards, and considerable deterioration has occurred since construction. There are six separable flood prone reaches in Crookston, and each reach is protected by a local levee, now in unreliable condition. The risk of failure of these levees during a large flood could cause catastrophic damages. The flood of April 1997 was the maximum flood of record, requiring a massive emergency flood fight to limit flood damages and prevent loss of life. It is expected that a 100-year flood event would result in damage in Crookston that would exceed \$15 million. The average annual benefits, all for flood control, are \$1,118,000.

FISCAL YEAR 2003: The requested amount of \$3,202,000 will be applied as follows:

Complete Stage 2 Construction	\$ 2,792,000
Real Estate Activities	10,000
Planning, Engineering and Design	200,000
Supervision and Administration	200,000

Total \$3,202,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs	
Provide lands, easements, and rights-of-way, and borrow and excavated or dredged material disposal areas.	\$2,475,000	\$ 0	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	300,000		
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	1,035,000	28,700	
Total Non-Federal Costs	\$3,810,000	\$28,700	

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The city of Crookston is the local sponsor for this project. A Project Cooperation Agreement (PCA) for construction has been coordinated with the city and they are in agreement with its terms and conditions. The PCA was executed in March 2001. The city has instituted a special services district property tax to pay for this flood control project. In addition, the city has assembled a package of financial support from several state and local agencies.

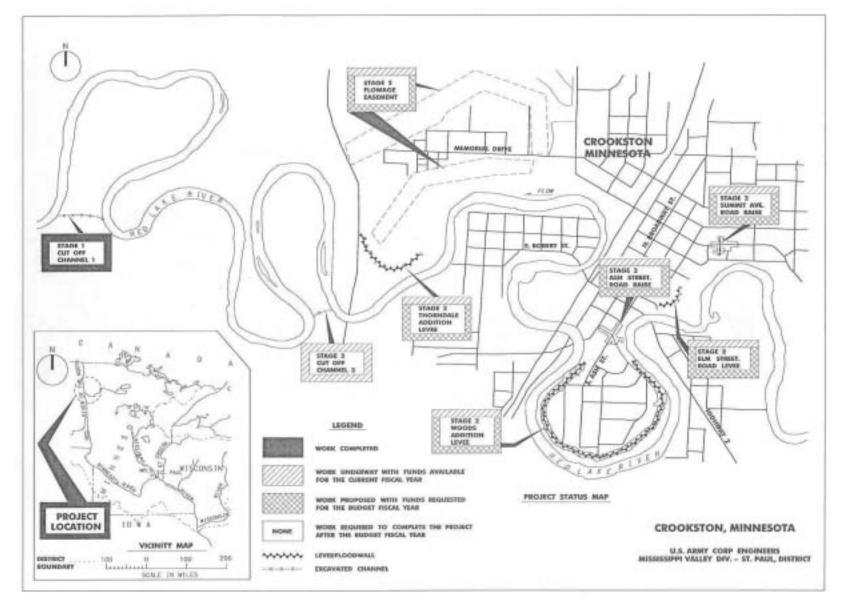
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$7,090,000 is an increase of \$70,000 over the latest estimate (\$7,020,000) presented to Congress (FY 2002). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$ 70,000
Total	\$ 70,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment was prepared in conjunction with the Feasibility Report. The environmental review process indicates that the proposed action does not constitute a major Federal action significantly affecting the environment. A Finding of No Significant Impact (FONSI) was signed 18 June 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001. The scheduled completion date for programmed work has accelerated from September 2004 to September 2003.

Mississippi Valley Division St. Paul District Crookston, Minnesota



Mississippi Valley Division St. Paul District Crookston, Minnesota

APPROPRIATION TITLE: Construction, General – Local Protection (Flood Control)

PROJECT: Meramec River Basin, Valley Park Levee, Missouri (Continuing)

LOCATION: The project is located in St. Louis County, Missouri, adjacent to the left bank of the Meramec River between miles 20.7 and 22.1 above the confluence with the Mississippi River.

DESCRIPTION: The project provides for construction of 3.2 miles of levee with 3 feet of freeboard above the 100-year flood profile, 6 gravity drains, 3 closure structures, interior drainage facilities including 5 ponding areas, 47 relief wells for underseepage control, and outdoor recreational facilities. All work is programmed.

AUTHORIZATION: Public Law 97-128, Section 2(h) and the Water Resources Development Acts of 1986 and 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 1.7 to 1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: .7 to 1 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.1 to 1 at 8 7/8 percent (FY 1991).

BASIS OF BENEFIT-COST RATIO: Benefits are based on a Engineering Documentation Report dated 8 November 2001 at October 2001 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2002)	PCT CMPL	COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost		\$32,120,000 10,808,000	Entire Project	60	Sep 2006
Cash Contribution	\$4,039,000 <sup>1</sup>			PHYSICAL	. DATA
Other Costs	6,769,000		Levee:		3.2 miles
			Gravity Drains:		6
Total Estimated Project Cost		\$42,928,000	Closure Structures:		3
·			Ponding Areas:		5
			Relief Wells:		47
			Recreational Features:		Various

Mississippi Valley Division

St. Louis District

Meramec River Basin, Valley Park Levee, Missouri

DHACIONI

4 February 2002

<sup>&</sup>lt;sup>1</sup> Includes Flood Control Contribution of \$3,886,000 and Recreation Contribution of \$153,000.

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT OF EST FED COST
Allocations to 30 September 2001	\$18,829,000	
Conference Allowance for FY 2002	1,200,000	
Allocation for FY 2002	204,000 <sup>1</sup>	
Allocations through FY 2002	19,033,000	59
Allocation Requested for FY 2003	600,000	61
Programmed Balance to Complete After FY 2003	\$12,487,000	
Unprogrammed Balance to Complete After FY 2003	0	

<sup>&</sup>lt;sup>1</sup> Reflects \$192,000 reduction assigned as savings and slippage and \$804,000 reprogrammed from the project

JUSTIFICATION: The city of Valley Park, Missouri, has experienced severe flooding from the Meramec River nine times since the early 1900's. The flood of record occurred in December 1982 and caused an estimated \$21,624,000 in damages to 108 residential structures and 142 business establishments. This flood had a recurrence interval of approximately once in 70 years. The recommended project will provide 100-year protection to 499 residences and 168 non-residential structures. In order to finance the non-Federal portion of project costs, city officials have instituted a number of innovative techniques including solicitation for the donation of right-of-way required for construction and establishment of a Tax Increment Financing (TIF) District. City residents strongly support the project as demonstrated by attendance at rallies, signs posted in yards and at businesses, and participation in letter-writing campaigns. There are no significant adverse environmental impacts associated with the project. Average annual benefits are as follows:

	Annual Benefits	Amount
	Flood Damage Reduction Recreation	\$2,507,900 264,200
	Total	\$2,772,100
FISCAL YEAR 2003: The requ	uested amount will be applied as follows:	
	ng, Engineering, and Design vision and Administration	\$ 280,000 320,000
Total		\$ 600,000

4 February 2002

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Dequirements of Legal Cooperation	Payments During Construction And	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement
Requirements of Local Cooperation	Reimbursements	Costs
Provide lands, easements, and rights-of-way.	\$4,369,000	\$
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	2,400,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.	153,000	
Pay 9.1 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of the project.	3,886,000	60,000
Total Non-Federal Costs	\$10,808,000	\$60,000

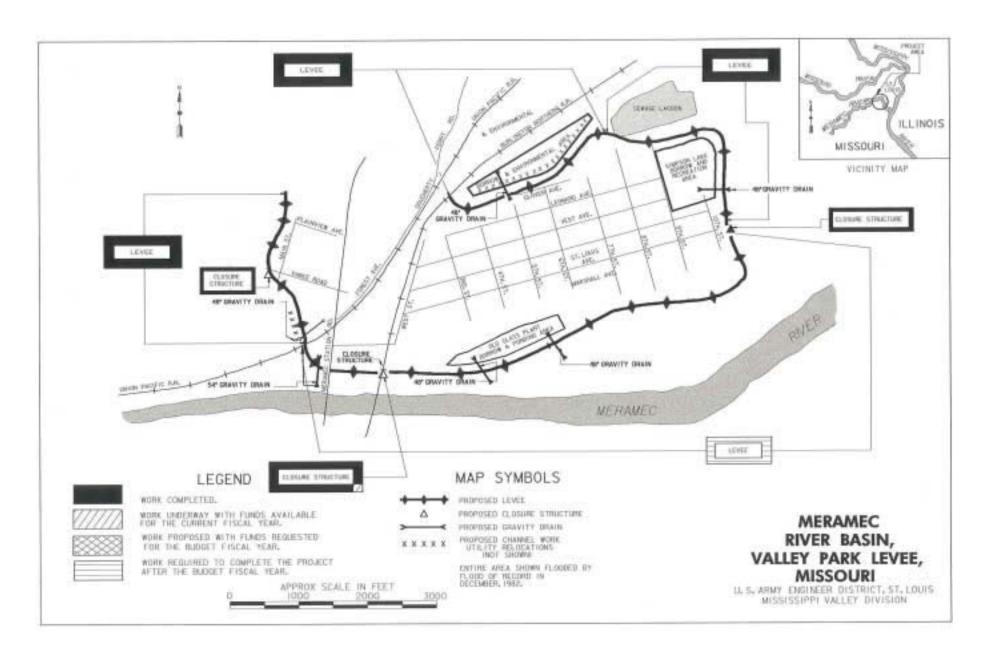
STATUS OF LOCAL COOPERATION: A Local Cooperation Agreement (LCA) was executed by the City of Valley Park and the Corps of Engineers on 12 August 1992, and an amendment was executed on 23 September 1997 to incorporate administrative language since the initial LCA. Valley Park is funding their lands, relocations, and cash contributions with Tax Increment Financing revenues and general city tax revenues as needed. Operation and maintenance costs will be funded by the city's sales tax, including a ½ cent tax for stormwater, a ½ cent tax for capital improvements, and, if needed, a 1 cent tax for general purposes.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$32,120,000 is an increase of \$3,064,000 from the latest estimate (\$29,056,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	\$ 812,000 2,252,000
Total	\$ 3,064,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: During preparation of the Plan Formulation Report and General Design Memorandum, Main Report, and Environmental Assessment, it was determined that implementation of the recommended plan would not have significant adverse effects on the quality of the human environment. A Finding of No Significant Impact was signed by the District Commander on 9 March 1987.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1983, and funds to initiate construction were appropriated in FY 1991. The project was modified by the Water Resources Development Act of 1999, which authorizes the Secretary to construct the project at maximum Federal expenditure of \$35,000,000, if the Secretary determines that the project as modified is technically sound, environmentally acceptable, and economically justified. The scheduled completion date of September 2006 for programmed work is a slippage from the latest completion date of September 2004 presented to Congress. This change is due to delay in design effort for the remaining right-of-way requirements (12 months) and constrained funding ceilings (12 months).



APPROPRIATION TITLE: Construction, General – Local Protection (Flood Control)

PROJECT: Ste. Genevieve, Missouri (Continuing)

LOCATION: The project is located in Ste. Genevieve County, Missouri, adjacent to the west bank of the Mississippi River between miles 121 and 125 above the confluence of the Ohio River.

DESCRIPTION: The project includes four parts. Part 1, consists of a 3.5 mile long levee that provides Urban Design Flood protection from Mississippi River flooding; a gravity drain pump facility with a 575 cubic feet per second capacity from three electric-powered pumps; a 505 acre ponding area; interior drainage ditching and grading; two closure structures, road, railroad and utility relocations; 20 relief wells; tree screens; an environmental mitigation area; and other features. Part 2 includes channel widening and one small levee along North Gabouri Creek; Part 3 is channel widening and one small levee along South Gabouri Creek; and Part 4 is recreation facilities such as picnic areas and trails on flood control lands along the tributary improvements and the levee. All work is programmed

AUTHORIZATION: The Water Resources Development Act of 1986 (Public Law 99-662).

REMAINING BENEFIT-REMAINING COST RATIO: 1.0 to 1 at 8-1/4 percent.

TOTAL BENEFIT-COST RATIO: 1.0 to 1 at 8-1/4 percent.

INITIAL BENEFIT-COST RATIO: 1.0 to 1 at 8-1/4 percent (FY 1995).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the authorizing language, which states "...Congress finds that, in view of the historic preservation benefits resulting from the project, the overall benefits of the project exceed the costs of the project."

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contributions Other Costs	\$4,474,000 <sup>1</sup> 9 416,000	\$35,775,000 13,890,000		Part 1 Part 2-4 Entire Project	99 0 95	Sep 2002 Sep 2008 Sep 2008
Total Estimated Project	3 410,000	\$49,665,000		Part 1	PHYSICAL [	DATA
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002 Allocation Requested for FY 2003 Programmed Balance to Complete After F Unprogrammed Balance to Complete After		28,398,000 850,000 1,719,000 30,117,000 300,000 \$ 5,358,000 \$ 0	84 85	Road Relocations: Railroad Relocation Utility Relocations: Levee: Gravity Drain: Closure Structures Pump Station: Ponding Area: Relief Wells: Part 2 (North Ga Channel Widening: Bridge Relocations Part 3 (South Ga Channel Widening: Bridge Removal: Low Water Cross New Bridges Small Levee: Part 4 (Recreation Hiking/Biking Trails Exercise Trail: Picnic Tables: Softball Fields:	: bouri Creek) : abouri Creek)	2 locations 2 locations 4 locations 3.5 miles 1 2 575 cfs 505 acres 20 0.62 miles 2 1.23 miles 1 1 2 0.28 miles 5.05 miles 1 mile 18

<sup>&</sup>lt;sup>1</sup> Includes \$4,141,000 Part 1 cash contribution; \$174,000 Part 2 cash contribution, offset by a reduction of \$211,000 Part 2 Federal payment; \$244,000 Part 3 cash contribution and \$126,000 non-Federal payment for cost-shared recreation.

182

 $<sup>^2</sup>$  Reflects \$136,000 reduction assigned as Savings and Slippage, and \$1,005,000 reprogrammed to the project.

JUSTIFICATION: Ste. Genevieve was founded on the west bank of the Mississippi River by French colonists. The earliest firm documentation of the settlement is a census taken in 1752, although some estimates place the founding as early as 1723. Over a period of years after the flood of 1785, the town was gradually moved from its original location to higher ground at its present location. In 1960 the Secretary of Interior designated a major part of the city and the agricultural fields between the town and the river a national Historic Landmark District. Ste. Genevieve was in the first group of six landmark districts so designated, a group that included Williamsburg, Virginia; Charleston, South Carolina; and Old Deerfield, Massachusetts. Ste. Genevieve is significant and unique because it has been occupied continuously since it was settled and because many of its earliest French colonial buildings were not destroyed during the intervening years. One fourth of all of North America's French colonial buildings are located in Ste. Genevieve. Ste. Genevieve contains the only collection of French colonial houses anywhere on the continent. Its many old residences, its archives and traditions, and its historical continuity make it a living memorial to the settlement and development of America. Most of the National Historic Landmark District was subject to flooding. The town had no Federally constructed flood protection, although agricultural areas directly across the Mississippi River and up and downstream from Ste. Genevieve are protected by Federally constructed levees. The community suffered major Mississippi River floods in 1973, 1979, 1982,1983, 1986, 1990, 1993 and 1995. The 1973 flood caused an estimated \$3,000,000 in damages in Ste. Genevieve. Damages from the 1982 flood were estimated by local officials to be \$2,400,000. The 1993 flood reached a stage equal to the theoretical 500-year flood in Ste. Genevieve, more than 22 feet above flood stage. Most of the historic buildings were saved by a monumental flood fight effort. According to community officials, bills received from the flood fight totaled \$2,000,000; not including donated materials and volunteer time. Volunteers came from all over the United States to fight the flood. This figure does not include flood damages or post-flood recovery. The 1995 flood was the second highest flood on record in Ste. Genevieve. Other Mississippi River floods occurred in Ste. Genevieve more frequently than the major floods and the community frequently prepared for flood fights. The town is also damaged by flooding along North and South Gabouri Creeks due to local rainfall, but the number of buildings flooded by the creeks is small compared to those flooded by the Mississippi River. As stated in the authorizing language, average annual benefits are equal to average annual costs due to historic preservation benefits.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Planning, Engineering,	and Design	\$ 300,000
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Total \$ 300,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operations, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way.	\$ 4,095,000	\$
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project	5,321,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.	126,000	2,000
Pay 8.7 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	4,348,000	133,000
Total Non-Federal Costs	\$ 13,890,000	\$ 135,000

STATUS OF LOCAL COOPERATION: The project sponsor is the Ste. Genevieve Joint Levee Commission, which is composed of members from the City of Ste. Genevieve, Ste. Genevieve County Levee District Number 2, and Ste. Genevieve County Levee District Number 3. The City has the financing for the project. This financing consists of a city sales tax passed in November 1994 that generates about \$240,000 per year and does not expire until the project is completed, a grant of \$5,500,000 from the National Park Service through the National Trust for Historic Preservation, and a \$5,050,000 Community Development Block Grant from the State of Missouri. The commission will purchase the lands required for the project through the powers of Levee Districts 2 and 3, will use the Federal Power of eminent domain, and will operate and maintain the project by using Levee District 3's power to impose property taxes for operating and maintaining flood protection works. The Project Cooperation Agreement (PCA) for Part 1 was executed on 8 August 1995. A design agreement for Parts 2, 3 and 4 will be executed in FY 2003. Construction will be accomplished via modifications to the PCA for Part 1 or separate PCA's.

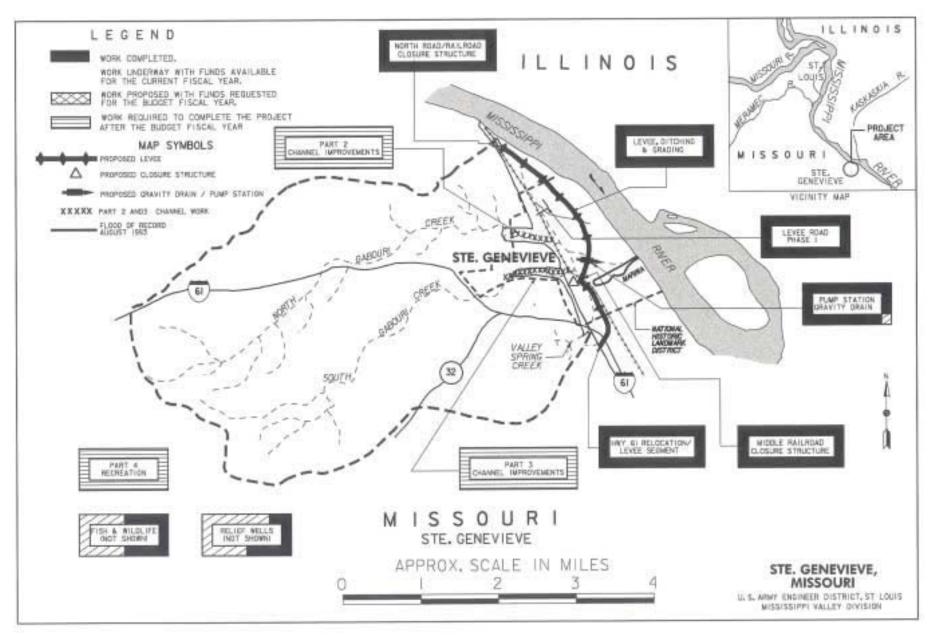
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$35,775,000 is an increase of \$1,065,000 from the latest estimate (\$34,710,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	\$ 571,000 494,000
Total	\$ 1,065,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Impact Statement was completed as part of the Feasibility Report in June 1984. An Environmental Assessment (EA) with a Finding of No Significant Impact was signed by the District Commander on 30 January 1995. An EA for Parts 2, 3, and 4 will be completed during preparation of the Engineering Documentation Report (EDR), scheduled for completion in July 2002.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1990, and funds to initiate construction were appropriated in Fiscal Year 1995. The scheduled completion date of September 2008 for programmed work is a slippage from the latest completion date of September 2006 presented to Congress. This change is due to constrained funding ceilings.

The Phase 1 levee project requires environmental mitigation due to adverse impacts on 11.2 acres classified as "waters of the United States." A 28.4 acre wetland mitigation area is included in Part 1 of the project. Estimated fish and wildlife mitigation costs are \$46,000.



Mississippi Valley Division St. Louis District Ste. Genevieve, Missouri

APPROPRIATION TITLE: Construction, General – Local Protection (Flood Control)

PROJECT: Grand Forks, North Dakota – East Grand Forks, Minnesota (Continuing)

LOCATION: Grand Forks is located in Grand Forks County in eastern North Dakota along the Red River of the North about 70 miles south of the Canadian border. East Grand Forks is located in Polk County in northwestern Minnesota across the river from Grand Forks.

DESCRIPTION: The National Economic Development and Locally Preferred Plan is a set-back flood barrier project with a level of protection for the 0.47 percent exceedence frequency event. This level of protection is equivalent to the 1997 flood. The project will consist of 30.0 miles of levees, floodwalls, and road raises. Approximately 260 residential structures will need to be acquired for project construction. All work is programmed.

AUTHORIZATION: Omnibus Consolidated and Emergency Supplemental Appropriations Act 1999, Section 137 (Public Law 105-277).

REMAINING BENEFIT-REMAINING COST RATIO: 1.66 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.12 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 1.12 to 1 at 7 1/8 percent (FY 2000).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1998 at December 1997 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement Federal Reimbursement Estimated Federal Cost (Ultimate)	rement	\$155,872,000 22,728,000 178,600,000		Entire Project	20	Sep 2006
Estimated Non-Federal Cost Cash Contribution Other Reimbursement: Flood Control Total Estimated Project Cost	\$ 23,268,000 176,660,000 -22,728,000	177,200,000 \$355,800,000				
Allocations to 30 September 2001 Conference Amount for FY 2002 Allocation for FY 2002 Allocations through FY 2002		26,741,000 31,000,000 27,245,000 53,986,000	1 30			
Allocation Requested for FY 2003 Programmed Balance to Complete a Unprogrammed Balance to Complete		30,000,000 94,614,000 0	47			
		PHYSICAL [	DATA			
Permanent Levees Tieback Levees Road Raises Hartsville Coulee Diversion Channel	26.6 miles 3.3 miles 9	Pumping Stations Major Gatewells English Coulee Diversion	n Channel	16 2 4.5 miles		

Mississippi Valley Division

St. Paul District

Grand Forks, North Dakota - East Grand Forks, Minnesota

4 February 2002

188

<sup>&</sup>lt;sup>1</sup> Reflects \$4,955,000 reduction assigned as savings and slippage and \$1,200,000 reprogrammed to the project.

JUSTIFICATION: Since 1950, twelve floods have threatened the Grand Forks-East Grand Forks area. Until 1997, a permanent levee in one short reach of Grand Forks, plus flood fight efforts in other areas of the two cities have prevented significant damages. The catastrophic flood of 1997 was the largest ever experienced in the area. Despite major emergency flood fight efforts, both cities were inundated. Estimates indicate that over \$1.5 billion in damages were sustained in the two cities as a result of the 1997 flood. The threat of future flooding has led to a sense of urgency for an expedited permanent solution. The recommended plan would provide reliable flood control for residents of Grand Forks and East Grand Forks. Average annual benefits are as follows:

Annual Benefits	Amount (1 October 2001)
Flood Control Recreation	\$30,514,000 2,106,400
Total	\$32,620,400

FISCAL YEAR 2003: The requested amount of \$30,000,000 will be applied as follows:

•	Levee Construction in East Grand Forks (Phase I) Levee Construction in Grand Forks (Phase I) Levee Construction in East Grand Forks (Phase II) Levee Construction in Grand Forks (Phase II) English Coulee Construction e Activities Engineering and Design and Administration	\$ 1,000,000 2,000,000 6,000,000 6,000,000 9,000,000 200,000 2,500,000 3,300,000
Total		\$30,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way, and borrow and excavated or dredged material disposal areas.	\$125,996,000	\$
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	50,664,000	
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	17,078,000	1,012,250
Pay one-half of the separable and joint costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	6,190,000	346,750
Federal reimbursement to non-Federal sponsor for costs incurred in excess of 50 percent of the costs allocated to flood control.	-22,728,000	
Total Non-Federal Costs	\$177,200,000	\$1,359,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsors are the cities of Grand Forks, North Dakota and East Grand Forks, Minnesota. A Project Cooperation Agreement was executed in January 2000. The non-Federal funding requirements will be met using reallocation of existing taxes, implementation of a new use tax, a city-wide assessment, and state bond funds. The District Commander approved the sponsors financing plans on 21 October 1999.

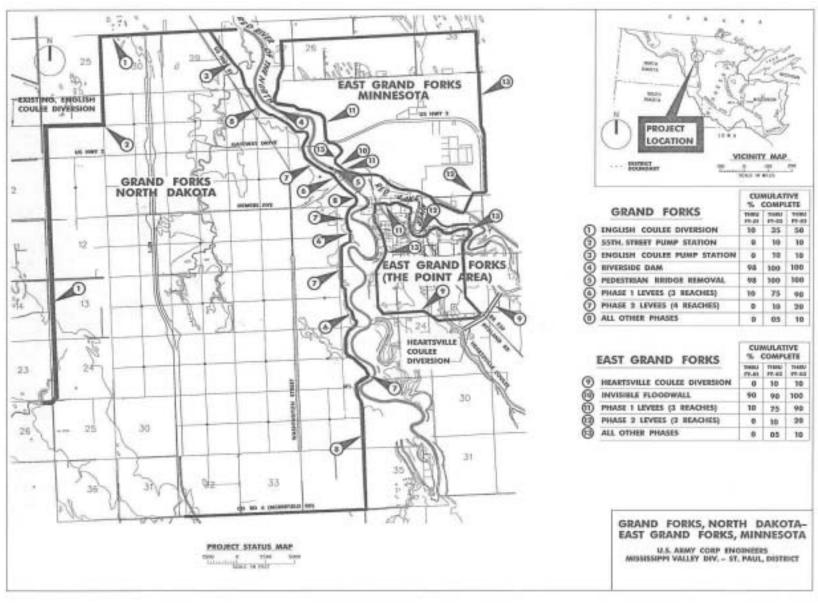
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$178,600,000 is a decrease of \$200,000 from the latest estimate (\$178,800,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	\$ 363,000 -563,000
Total	\$ -200,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Impact Statement was prepared in conjunction with the General Reevaluation Report which was completed in December 1998. The Record of Decision was signed 17 February 1999.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2000. The scheduled completion date for programmed work advanced to September 2006 from December 2006, the latest completion date submitted to Congress (FY 2002). Funding schedule for award of levee construction contracts for East Grand Forks (Phase II) and Grand Forks (Phase II) to take advantage of the fall 2002 construction season will advance project completion three months. The removal of the Pedestrian Bridge and the Riverside Dam bank Stabilization Projects is essentially complete. Construction is underway on the first phases of levee work in both communities. Construction of the English Coulee Diversion Extension is scheduled to begin shortly. Supply contracts for pumps and equipment, as well as demolition of structures along the levee alignment are ongoing.

The April 1997 flood that devastated the Grand Forks and East Grand Forks area resulted in renewed interest for a permanent flood control solution. A General Reevaluation Report and Environmental Impact Statement was completed in December 1998. The Report contained the plan formulation process used to identify a setback flood barrier project that would provide protection equal to the 1997 flood event, including the evaluation of risk and uncertainty. Both communities support the setback flood barrier plan, which is the National Economic Development Plan. Conditional project authorization (subject to a Chief's Report) was contained in the Omnibus Consolidated and Emergency Supplemental Appropriations Act of 1999 (Public Law 105-277). The Chief's Report was completed in December 1998.



Mississippi Valley Division

St. Paul District

APPROPRIATION TITLE: Construction, General-Local Protection (Flood Control)

PROJECT: Sheyenne River, North Dakota (Continuing)

LOCATION: The project is located in southeastern North Dakota along the Sheyenne River, from near Baldhill Dam downstream to the confluence with the Red River of the North at Fargo. Parts of Griggs, Steele, Barnes, Ransom, Richland and Cass Counties are included in the project area.

DESCRIPTION: The project, as authorized, consists of (1) 12.7 miles of levees and a 6.8-mile flood diversion channel at West Fargo, (2) 14.8 miles of levees and a 7.4 mile flood diversion channel from Horace to West Fargo, (3) a 5-foot raise of the Baldhill Dam flood control pool, and (4) a dam and reservoir with approximately 35,000 acre-feet of storage for flood control on the Maple River. The plan, excluding the Maple River dam, would reduce flood damages to approximately 2,000 residences and farmsteads and 50,000 acres of agricultural land. Estimated damages caused by a one percent chance flood are \$109 million. On an average annual basis, over \$28 million in flood damages are estimated in the basin. Most of these damages occur in the West Fargo urban area.

Construction includes the West Fargo Unit (\$16,930,000 Federal and \$7,370,000 Non-Federal), the Horace to West Fargo Unit (\$8,770,000 Federal and \$3,130,000 Non-Federal), and the Baldhill Dam Unit (\$7,100,000 Federal and \$2,360,000 Non-Federal). All work is programmed.

The Maple River Reservoir Unit was deleted from the project due to lack of economic justification.

AUTHORIZATION: Water Resources Development Act of 1986 (Public Law 99-662).

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit – remaining cost ratio is not applicable since construction is substantially complete.

TOTAL BENEFIT-COST RATIO: 1.1 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 1.1 to 1 at 7 1/8 percent (FY 2000).

BASIS OF BENEFIT-COST RATIO: Benefits for the remaining unit, the Baldhill Pool Raise, are from the latest available evaluation (Design Memorandum) dated November 1998, revised June 1999, at October 1997 price levels. Benefits for the West Fargo Unit are from the Letter Report dated January 2001, at October 2000 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost		\$32,800,000 12,860,000		West Fargo Unit Horace to West	100	Dec 1994
Cash Contributions	\$ 2,654,000			Fargo Unit	100	Nov 1992
Other Costs	10,206,000			Baldhill Dam Unit	60	Sep 2003
Total Estimated Project Cost		\$45,660,000 <sup>1</sup>				·
·				Total Project	90	Sep 2003
Allocations to 30 September 2001		$$28,703,000^2$		·		
Conference Allowance for FY 2002		2,000,000				
Allocation for FY 2002		1,680,000 <sup>3</sup>				
Allocations through FY 2002		\$30,383,000	93			
Allocation Requested for FY 2003		\$2,417,000	100			
Programmed Balance to Complete after	FY 2003	0				
Unprogrammed Balance to Complete af	ter FY 2003	0				

## PHYSICAL DATA

WEST FARGO UNIT:

Earthen Levee

12.7 miles

Flood Diversion Channel

6.8 miles

HORACE TO WEST FARGO UNIT:

Trapezoidal Excavated Channel

Earthen Levees

7.4 miles 14.8 miles

**BALDHILL DAM UNIT:** 

Flood Control Pool Raise 5-foot raise

(by modifications to gates - not embankment)

JUSTIFICATION: The Sheyenne River, located in the southeastern portion of North Dakota, drains 7,140 square miles into the Red River of the North which flows northward to Lake Winnipeg in Manitoba, Canada. Recurrent flooding causes serious damage at the communities of Valley City, Lisbon, and West Fargo, and

Mississippi Valley Division

St. Paul District

Sheyenne River,
North Dakota

<sup>&</sup>lt;sup>1</sup> Excludes all costs associated with the Maple River Unit. The Maple River Unit has been deleted from the project due to lack of economic justification.

<sup>&</sup>lt;sup>2</sup> Excludes \$475,000 sunk cost for the Maple River Unit and \$1,150,000 for Kindred Dam.

<sup>&</sup>lt;sup>3</sup> Reflects \$320,000 reduction assigned as savings and slippage.

along the Sheyenne River. High Sheyenne River flows also aggravate downstream flooding along the Red River of the North. The maximum flood of record in 1882 inundated much of Valley City and Kindred. Over 100,000 acres of cropland in the basin were flooded by the Red River of the North and the Sheyenne, Wild Rice, and Maple Rivers. On 5 July 1975, the flood in the Sheyenne River basin crested at Kindred within 0.3 foot of the record flood, and the crest at West Fargo set a new record. Actual flood damages for this flood were \$96,762,000 of which \$2,132,000 were urban and \$94,630,000 were rural. Urban flood damages of \$14,159,000 were prevented due to emergency levee protection. The rural damages include cross-country (sheet flow) as well as overbank flooding. In 1979, the Sheyenne River at West Fargo reached a flow of 3,500 cubic feet per second and a stage .03 foot less than the 1975 summer flood. Damages including the cost of successful flood fights were \$7,388,000, of which \$1,903,000 were urban, \$4,676,000 agricultural, and \$809,000 transportation. In July and August 1993, intense rainstorms over the Sheyenne, Maple and Rush River watersheds caused flood damages in many areas. In Valley City, an estimated \$3 million in flood damages were incurred. In the Harwood area, just downstream from the West Fargo levees and diversion project, widespread agricultural and rural residential damages were sustained. Both the Horace and the West Fargo levees and diversion projects prevented substantial damages (\$8 million and \$36 million, respectively) in their first year of operation. The average annual flood damages for the Sheyenne River basin from overbank flooding over an assumed 100-year period at October 1994 price levels are estimated at \$39,905,061, of which \$37,506,749 are urban, \$2,053,546 agricultural and \$344,766 transportation. The recommended improvements will protect about 2,000 residences and farmsteads in the 100-year floodplain and reduce flood damages on over 50,000 acres of agricultural land. The avera

FISCAL YEAR 2003: The requested amount of \$2,417,000 will be applied as follows:

#### BALDHILL DAM UNIT (Pool Raise):

Complete construction of Wesley Acres protection Complete construction of cabin modifications Complete construction of mitigation area Initiate and complete boundary survey Planning, Engineering & Design Supervision and Administration	\$ 600,000 40,000 80,000 250,000 50,000 80,000
Subtotal	\$1,100,000
WEST FARGO UNIT:	
Complete construction of pump station Planning, Engineering & Design Supervision and Administration	\$ 1,200,000 30,000 87,000
Subtotal	\$ 1,317,000
Total	\$ 2,417,000
Mississippi Valley Division	St. Paul District

Sheyenne River, North Dakota NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
WEST FARGO UNIT:		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$1,280,000	\$
Modify or relocate utilities, roads, bridges, (except railroad bridges), and other facilities, where necessary for the construction of the project.	4,854,000	
Pay 5 percent of the costs allocated to flood control in cash and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	1,236,000	38,000
Subtotal	\$7,370,000	\$ 38,000

HODAGE TO WEST FAROGUNIT	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
HORACE TO WEST FARGO UNIT:		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$ 540,000	\$
Modify or relocate utilities, roads, bridges, (except railroad bridges), and other facilities, where necessary for the construction of the project.	2,014,000	
Pay 5 percent of the costs allocated to flood control in cash and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	576,000	32,800
Subtotal	\$3,130,000	\$ 32,800
BALDHILL DAM POOL RAISE:		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$ 1,495,000	\$
Pay 8.9 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986 and bear all costs of operation, maintenance, repair, rehabilitation and replacement of Flood		
Control Facilities.	865,000	3,200
Subtotal	\$ 2,360,000	\$ 3,200
Total Non-Federal Cost	\$12,860,000	\$ 74,000

Mississippi Valley Division

St. Paul District

Sheyenne River, North Dakota 197

4 February 2002

The non-Federal sponsors have also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Southeast Cass Water Resource District is the local sponsor for the West Fargo Unit and the Horace to West Fargo Unit. The Local Cooperation Agreement (LCA) for the West Fargo Unit was executed on 25 July 1988. An amendment to the LCA for an additional pump station was executed on 4 June 2001. (SEE OTHER INFORMATION.) The LCA for the Horace Unit was executed on 6 March 1990. Both of these units are scheduled to be turned over to Southeast Cass Water Resource District in 2002. In April 1994, the Sheyenne River Joint Water Resource District (WRD) was formed to act as the non-Federal sponsor for the flood control pool raise at the Baldhill Dam. The Joint WRD consists of seven member water resource districts, including both upstream and downstream representatives. The Project Cooperation Agreement for the Baldhill Pool Raise was executed on 31 May 2000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$32,800,000 is an increase of \$193,000 from the latest estimate (\$32,607,000) presented to Congress (FY 2002). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$ 193,000
Total	\$ 193,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Draft Environmental Impact Statement was filed with the Environmental Protection Agency (EPA) on 28 May 1982. The final statement was filed with the EPA on 13 April 1984. The Record of Decision was signed on 6 June 1987. The Finding of No Significant Impact for modifications to the Baldhill Dam Unit was signed on 19 October 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1976 and funds to initiate construction were appropriated in FY 1990. Floods occurred in 1994, 1995, 1996, and 1997, during which the performance of the Horace and West Fargo Units was excellent, meeting all expectations. A significant rainfall event in June 2000 overwhelmed the pump station for the West Fargo Unit, requiring numerous portable pumps to keep the interior ponding level of the Sheyenne River in check. At the request of the local sponsor, the interior flood control for the unit was reevaluated, and an additional 63,000 gpm pump station was recommended and approved in a Letter Report dated January 2001 in order to provide the authorized level of protection.

#### SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

#### **WEST FARGO UNIT:**

Estimated Federal Cost \$16,930,000 Estimated Non-Federal Cost 7,370,000

Cash Contributions \$1,236,000 Other Costs \$6,134,000

Total West Fargo Unit \$24,300,000

REMAINING BENEFIT-REMAINING COST RATIO FOR WEST FARGO UNIT: The remaining benefit-remaining cost ratio is not applicable since construction is substantially complete.

TOTAL BENEFIT-COST RATIO FOR WEST FARGO UNIT: Total benefit-cost ratio for the entire project is 1.1 to 1 at 7-1/8 percent..

#### HORACE TO WEST FARGO UNIT:

Estimated Federal Cost \$8,770,000 Estimated Non-Federal Cost 3,130,000

Cash Contributions \$ 576,000 Other Costs \$ 2,554,000

Total Horace to West Fargo Unit \$11,900,000

REMAINING BENEFIT-REMAINING COST RATIO FOR HORACE TO WEST FARGO UNIT: The remaining benefit-remaining cost ratio is not applicable since construction is substantially complete.

TOTAL BENEFIT-COST RATIO FOR HORACE TO WEST FARGO UNIT: Total benefit-cost ratio for the entire project is 1.1 to 1 at 7-1/8 percent.

# SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS (Continued):

#### **BALDHILL DAM UNIT:**

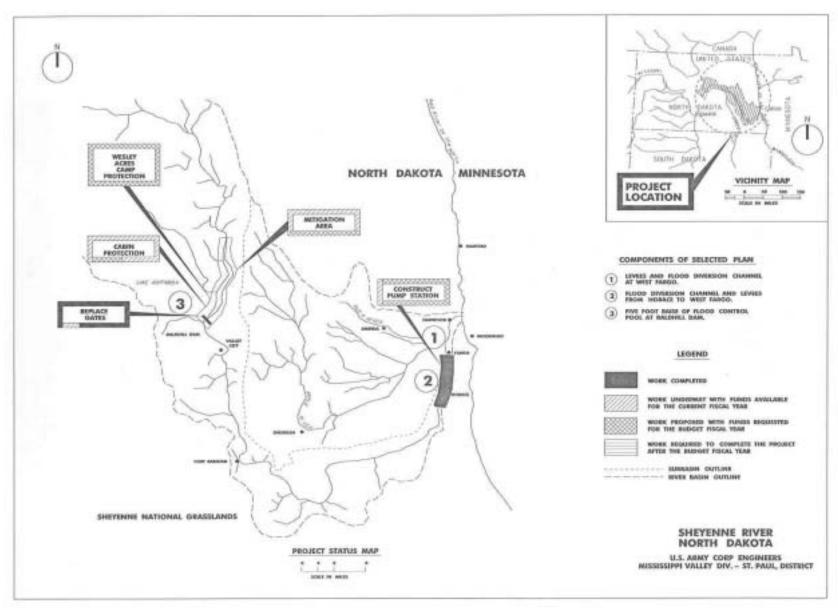
Estimated Federal Cost \$7,100,000 Estimated Non-Federal Cost 2,360,000

Cash Contributions \$842,000 Other Costs 1,518,000

Total Baldhill Dam Unit \$9,460,000

REMAINING BENEFIT-REMAINING COST RATIO FOR BALDHILL DAM UNIT: The remaining benefit-remaining cost ratio is not applicable since construction is substantially complete.

TOTAL BENEFIT-COST RATIO FOR BALDHILL DAM UNIT: Total benefit-cost ratio for the entire project is 1.1 to 1 at 7-1/8 percent.



Mississippi Valley Division

St. Paul District

APPROPRIATION TITLE: Construction, General – Reservoir (Flood Control)

PROJECT: LaFarge Lake, Kickapoo River, Wisconsin, Project Modification (Continuing)

LOCATION: LaFarge is located in Vernon County in southwestern Wisconsin along the Kickapoo River, a tributary of the Wisconsin River.

DESCRIPTION: The proposed project modification involves transfer to the State of Wisconsin of approximately 8,569 acres of land associated with the LaFarge Dam and Lake portion of the Kickapoo River, Wisconsin, flood control project. Up to 1,200 acres of this land that are culturally and religiously significant sites of the Ho-Chunk Nation will be transferred to the Secretary of the Interior. The modification also includes deauthorizing the construction of the reservoir and dam, while completing other features of the original project. These features include the reconstruction of State Highway 131 and County Routes P and F, the completion of all necessary environmental cleanups; site safety modifications of the water control structures, and the fulfillment of the Federal requirements of the Advisory Council on Historical Preservation. All work is programmed.

AUTHORIZATION: Flood Control Act of 1962 and Water Resources Development Act of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT - COST RATIO: Not applicable.

INITIAL BENEFIT - COST RATIO: Not applicable.

BASIS OF BENEFIT - COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost	\$17,000,000 2,900,000		Entire Project	40	Dec 2002
Total Estimated Project Cost	\$19,900,000		PHYSICAL I	DATA	
Allocations to 30 September 2001 Conference Amount for FY 2002 Allocation for FY 2002 Allocations through FY 2002	7,472,000 6,150,000 5,167,000 12,639,000	74	Land Transfer Road Reconstruction 1 State highway 2 County roads		8,569 Acres

<sup>&</sup>lt;sup>1</sup> Reflects \$983,000 reduction assigned as savings and slippage.

### SUMMARIZED FINANCIAL DATA (Continued)

Allocation Requested for FY 2003	4,361,000	100
Programmed Balance to Complete after FY 2003	0	
Unprogrammed Balance to Complete after FY 2003	0	

JUSTIFICATION: The original project, authorized in the 1962 Flood Control Act, included a dam and impoundment on the Kickapoo River primarily for flood control, and supplemental flood protection at Soldiers Grove and Gays Mills. Construction of the original project was initiated in July 1971, but was suspended in July 1975 due to alleged water quality problems and lack of support by the Governor and Congressmen of the State of Wisconsin. Land acquisition was about 80 percent complete. Subsequent studies indicated that there was no feasible and acceptable alternative to the flooding in the Kickapoo Valley involving a wet or dry dam at LaFarge. Project lands were transferred to the State of Wisconsin and Department of Interior in December 2000. Prior to the transfer, site safety modifications; remediation of abandoned farm sites, wells, and solid waste; and fulfillment of cultural and historical requirements were met. The project feature remaining to be completed is relocation of State Highway 131 and County Highways P and F. The relocation of State Highway 131 and County Highways P and F was initiated in 2001, and is scheduled for physical completion in December 2002.

FISCAL YEAR 2003: The requested amount of \$4,361,000 will be applied as follows:

Planning, Engineering and Design	\$ 20,000
Reimbursement of Hwy 131, P & F Work (Contract with Wisconsin)	4,341,000
Total	\$4,361,000

NON-FEDERAL COST: Not applicable.

STATUS OF LOCAL COOPERATION: The State of Wisconsin created the Kickapoo Reserve Management Board (KRMB), a Governor appointed board of citizens from the watershed, including Ho-Chunk Nation members. KRMB was created in 1993 to oversee administration of the lands transferred to the State.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$17,000,000 is the same project cost estimate presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The St. Paul District completed a Programmatic Agreement with regard to the cultural and historical resources in October 1997. The Environment Assessment for transfer of the land was completed in February 2000. The USFWS Coordination Act Report is complete. An Environmental Assessment to fund the Highway 131 relocation was completed in January 2001. A categorical exclusion for the Highway P relocation was completed in September 2001. Environmental review of the Highway F relocation is anticipated in the spring of 2002.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1971. The scheduled completion date for programmed work has accelerated from September 2003 to December 2002.

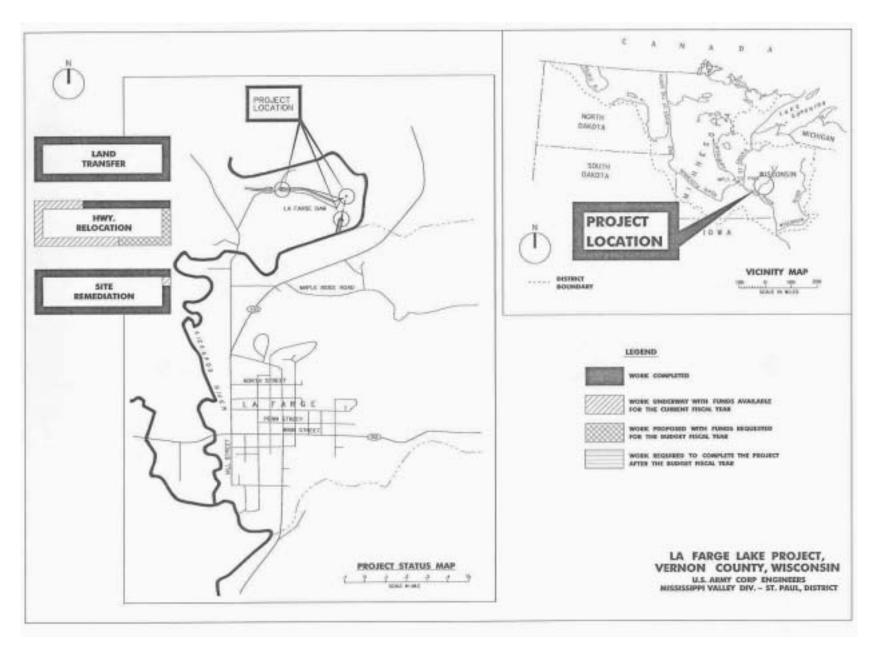
Mississippi Valley Division

St. Paul District

LaFarge Lake, Kickapoo River, Wisconsin

4 February 2002

203



Mississippi Valley Division

St. Paul District

APPROPRIATION TITLE: Construction, General - Reservoirs (Dam Safety Assurance)

PROJECT: Homme Dam, North Dakota (Continuing)

LOCATION: Homme Dam is located in Walsh County in northeastern North Dakota, about two miles west of the city of Park River. The dam is on the South Branch of the Park River, at river mile 62.1 above the main stem's confluence with the Red River of the North. The drainage area above Homme Dam is 226 square miles.

DESCRIPTION: One of the principle features of the dam is a reinforced concrete flat-crested spillway and stilling basin located on the right abutment of the reservoir. The recommended plan includes construction of a new spillway that increases the existing capacity from 44 percent to 100 percent of the probable maximum flood. All work is programmed.

AUTHORIZATION: Flood Control Act of 1944.

REMAINING BENEFIT-REMAINING COST RATIO: No detailed economic analysis has been performed on this project.

TOTAL BENEFIT-COST RATIO: No detailed economic analysis has been performed on this project.

INITIAL BENEFIT-COST RATIO: No detailed economic analysis has been performed on this project.

BASIS OF BENEFIT-COST RATIO: No detailed economic analysis has been performed on this project.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost	\$11,500,000 78.000		Entire Project	55	December 2002
Total Estimated Project Cost	\$11,578,000				
	ψ,σσ,σσσ		PHYSICAL	DATA	
Allocations to 30 September 2001	7,212,000				
Conference Amount for FY 2002	2,400,000				
Allocation for FY 2002	2,016,000 <sup>1</sup>	1			
Allocations through FY 2002	9,228,000	80			

Mississippi Valley Division St. Paul District Homme Dam, North Dakota

<sup>&</sup>lt;sup>1</sup> Reflects \$384,000 reduction assigned as savings and slippage.

ACCUM PCT OF EST FED COST

Allocation Requested for FY 2003	2,272,000	100
Programmed Balance to Complete after EV 2003	Λ	

Unprogrammed Balance to Complete after FY 2003 0

JUSTIFICATION: This site has been identified as having inadequate spillway capacity that would result in the dam embankment being overtopped by about 2.3 feet during the probable maximum flood (PMF). An abrupt increase in loss of life at about 44 percent of the PMF suggests that the dam is no longer capable of safely passing events greater than this value with adequate free board and that a failure resulting from a breach of the main embankment is possible. The potential for loss of life associated with the PMF required dam modification.

FISCAL YEAR 2003: The requested amount of \$2,272,000 will be applied as follows:

Complete Construction	\$2,106,000
Planning, Engineering and Design	48,000
Supervision and Administration	118,000

Total \$2,272,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsors must comply with the requirements listed below.

Requirements of Local Cooperation		Payments During Construction and Reimbursements		Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs	
Pay 15 percent of the cost of the dam safety modifications assigned to project purposes in the same manner as costs were allocated for the original project (0.68 percent of total project costs).	\$	78,000	\$	0	
Total non-Federal Costs	\$	78,000	\$	0	

The non-Federal sponsors have agreed to make required payments concurrently with project construction.

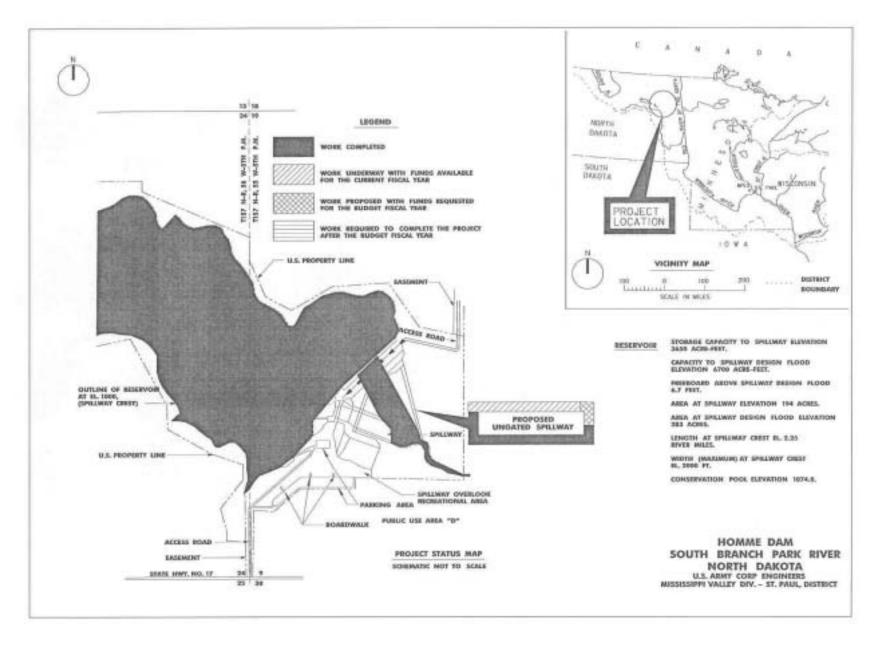
STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement was executed in April 2000. The local sponsors are Park River and Grafton, North Dakota.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$11,500,000 is a decrease of \$900,000 from the latest estimate (\$12,400,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments	\$ 144,000 -1,044,000
Total	\$ -900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The required National Environmental Policy Act environmental documentation has been completed, and the Finding of No Significant Impact was signed on 20 February 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were provided in FY 1993 under the Operations and Maintenance appropriation. The Homme Lake Dam Safety reconnaissance report was approved 25 August 1994 by the Assistant Secretary of the Army (ASA). Funds were initially appropriated under the Construction, General appropriation in FY 1995. The construction contract was awarded in May 2000. The scheduled completion date for programmed work has accelerated from September 2003 to December 2002.



Mississippi Valley Division St. Paul District Homme Dam, North Dakota

APPROPRIATION TITLE: Construction, General – Environmental Mitigation, Restoration, and Protection

PROJECT: Upper Mississippi River System Environmental Management Program, Illinois, Iowa, Minnesota, Missouri, and Wisconsin (Continuing)

LOCATION: The Program is authorized for those river reaches having commercial navigation channels on the Upper Mississippi River, Illinois River, Minnesota River, St. Croix River, and Kaskaskia River in the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The following counties are included: (Illinois) Jo Daviess, Carroll, Whiteside, Rock Island, Mercer, Henderson, Hancock, Adams, Pike, Calhoun, Jersey, Madison, St. Clair, Monroe, Randolph, Jackson, Union, Alexander, Pulaski, Brown, Cass, Schuyler, Fulton, Mason, Peoria, Tazewell, Woodford, Marshall, Putnam, Bureau, LaSalle, Grundy, Will; (Iowa) Allamakee, Clayton, Dubuque, Jackson, Clinton, Scott, Muscatine, Louisa, Des Moines, Lee; (Wisconsin) St. Croix, Pierce, Pepin, Buffalo, Trempealeau, La Cross, Vernon, Crawford, Grant; (Minnesota) Anoka, Hennepin, Scott, Dakota, Ramsey, Washington, Goodhue, Wabasha, Winona, Houston; (Missouri) Clark, Lewis, Marion, Ralls, Pike, Lincoln, St. Charles, St. Louis, Jefferson, Ste. Genevieve, Perry, Cape Girardeau, Scott, Mississippi.

DESCRIPTION: The purpose of the Upper Mississippi River System Environmental Management Program (UMRS-EMP) is to ensure the coordinated development and enhancement of the Upper Mississippi River System, recognizing its several purposes. Habitat rehabilitation and enhancement projects are designed to counteract the effects of backwater sedimentation. Long-Term Resource Monitoring provides scientific information for more informed management of the UMRS. Ninety-seven percent of authorized UMRS-EMP appropriations have been used to design and construct habitat rehabilitation and enhancement projects and for Long-Term Resource Monitoring. Recreation development is an authorized program element. All work is programmed.

AUTHORIZATION: FY 1985 Supplemental Appropriations Act, P.L. 99-88; Water Resources Development Act of 1986, PL 99-662, Section 1103; Water Resources Development Act of 1990, P.L. 101-640, Section 405; and the Water Resources Development Act of 1992, P.L. 102-580, Section 107, and the Water Resources Development Act of 1999, P.L. 106-53, Section 509...

REMAINING BENEFIT-REMAINING COST: The remaining benefit-remaining cost ratio for the entire project is not applicable because monetary benefits are not quantified.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because monetary benefits are not quantified. Projects within the UMRS-EMP Program are selected for design and construction based on continued assessment of habitat restoration and enhancement opportunities as determined by the involved Federal and non-Federal partners.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because monetary benefits are not quantified.

BASIS OF BENEFIT-COST RATIO: The basis for the benefit-cost ratio for the entire project is not applicable because monetary benefits are not quantified.

SUMMARIZED FINANCIAL DATA		\$ 766,19	95.000	ACCUM PCT OF EST FED COST
Estimated Federal Cost			49,000	
Estimated Non-Federal Cost		•	,	
Cash Contribution	\$ 7,749,000			
Other Costs	0			
Total Estimated Project Cost		\$ 773,94	14,000	
Allocations to 20 September 2001		220 5	20 000	
Allocations to 30 September 2001		•	38,000	
Conference Allowance for FY 2002		,	00,000	
Allocation for FY 2002		•	03,000	
Allocations through FY 2002		237,34	41,000	31
Allocation for FY 2003		12.20	00,000	33
Programmed Balance to Complete Af	fter FY 2003	•	54.000	
Unprogrammed Balance to Complete		\$	0	
Shiphaghammaa Balamaa ta dompiata	, 1 L000	Ψ	•	

<sup>&</sup>lt;sup>1</sup> Reflects \$3,197,000 reduction assigned as savings and slippage.

STATUS: (1 January 2002)		PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE <sup>1/</sup>
Long Term Resource Monitoring		34	(Sep 20)
Economic Impacts of Recreation Study		100	(Sep 92)
Traffic Monitoring		100	(Sep 90)
Habitat Rehabilitation and Enhancement P			
Angle Blackburn, MO	ST. LOUIS DISTRICT	0	Deferred
Batchtown Mgt. Area, IL	ST. LOUIS DISTRICT	58	Dec 04
Calhoun Point, IL	ST. LOUIS DISTRICT	18	Jul 05
Clarksville Refuge, MO	ST. LOUIS DISTRICT	100	(Apr 90)
Cuivre Island, MO	ST. LOUIS DISTRICT	100	(Jul 99)
Dresser Island, MO	ST. LOUIS DISTRICT	100	(Sep 91)
Jefferson Barracks Side Channel	ST. LOUIS DISTRICT	0	Jun 07
Least Tern, MO	ST. LOUIS DISTRICT	22	Deferred
Norton Woods, MO	ST. LOUIS DISTRICT	0	Deferred
Pharrs Island, Phase I, MO	ST. LOUIS DISTRICT	100	(Jun 92)
Pools 25 and 26, MO	ST. LOUIS DISTRICT	22	Aug 06
Salt Lake/Ft Chartres S.C., IL	ST. LOUIS DISTRICT	7	Jun 05
Stag & Keaton Is., MO	ST. LOUIS DISTRICT	100	(Sep 98)
Stump Lake, IL	ST. LOUIS DISTRICT	100	(Nov 98)
Schenimann, MO	ST. LOUIS DISTRICT	14	Dec 04
Stone Dike Alteration, IL/MO	ST. LOUIS DISTRICT	8	Apr 05
Swan Lake, IL	ST. LOUIS DISTRICT	100	Dec 02
Turner Island/Chute, IL	ST. LOUIS DISTRICT	0	May 07
Andalusia Refuge, IL	ROCK ISLAND DISTRICT	100	(Dec 94)
Banner Marsh, IL	ROCK ISLAND DISTRICT	95	Aug 02
Bay Island, MO	ROCK ISLAND DISTRICT	100	(Nov 94)
Bertom Lake, WI	ROCK ISLAND DISTRICT	100	(Jun 92)
Big Timber, IA	ROCK ISLAND DISTRICT	100	(Jun 95)
Brown's Lake, IA	ROCK ISLAND DISTRICT	100	(Sep 94)
Chautauqua Refuge, IL	ROCK ISLAND DISTRICT	98	Sep 02
Cottonwood Island, MO	ROCK ISLAND DISTRICT	100	(Dec 99)
Gardner Div., IL	ROCK ISLAND DISTRICT	90	Aug 04
Huron Island, IA	ROCK ISLAND DISTRICT	0	Deferred

Mississippi Valley Division

Rock Island District

Upper Mississippi River System Environmental Management Program Illinois, Iowa, Minnesota, Missouri, and Wisconsin

STATUS: (1 January 2002) (Continued)		PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE <sup>1/</sup>
Lake Odessa, IA	ROCK ISLAND DISTRICT	25	Dec 05
Pool 11 Islands, WI/IA	ROCK ISLAND DISTRICT	30	Jan 06
Pleasant Creek, IA	ROCK ISLAND DISTRICT	30	Jan 06
Monkey Chute, MO	ROCK ISLAND DISTRICT	100	(Aug 89)
Peoria Lake, IL	ROCK ISLAND DISTRICT	100	(Sep 97)
Peosta Channel, IA	ROCK ISLAND DISTRICT	0	Deferred
Pool 12 Overwintering IA/IL	ROCK ISLAND DISTRICT	10	Dec 06
Potters Marsh, IL	ROCK ISLAND DISTRICT	100	(Jun 96)
Princeton, IA	ROCK ISLAND DISTRICT	100	(Dec 01)
Rice Lake, IL	ROCK ISLAND DISTRICT	10	Sep 06
Smith's Creek, IA	ROCK ISLAND DISTRICT	9	Dec 05
Spring Lake, IL	ROCK ISLAND DISTRICT	100	(Sep 01)
Ambrough Slough, WI	ST. PAUL DISTRICT	20	Sep 03
Blackbird Slough, MN	ST. PAUL DISTRICT	0	Deferred
Blackhawk Park, WI	ST. PAUL DISTRICT	100	(Nov 90)
Bussey Lake, IA	ST. PAUL DISTRICT	100	(Jun 96)
Capoli Slough, WI	ST. PAUL DISTRICT	7	Sep 08
Cold Springs, WI	ST. PAUL DISTRICT	100	(Jun 94)
Conway Lake, IA	ST. PAUL DISTRICT	2	Aug 11
East Channel, WI, MN	ST. PAUL DISTRICT	100	(Jun 97)
Finger Lakes, MN	ST. PAUL DISTRICT	100	(Jul 94)
Guttenberg Fish Ponds, IA	ST. PAUL DISTRICT	100	(Nov 89)
Harpers Slough, WI	ST. PAUL DISTRICT	10	Aug 07
Indian Slough, WI	ST. PAUL DISTRICT	100	(Jun 93)
Island 42, MN	ST. PAUL DISTRICT	100	(May 87)
Lake Onalaska, WI	ST. PAUL DISTRICT	100	(Oct 89)
Lansing Big Lake, IA	ST. PAUL DISTRICT	100	(Nov 94)
Long Lake, WI	ST. PAUL DISTRICT	100	(May 00)
Long Meadow Lake, MN	ST. PAUL DISTRICT	10	Sep 05

STATUS: (1 January 2002) (Continued)		PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE <sup>1</sup>
Miss. Rvr Bank			
Stabilization, MN/WI	ST. PAUL DISTRICT	100	(Sep 99)
Peterson Lake, MN	ST. PAUL DISTRICT	100	(Jun 96)
Polander Lake, MN	ST. PAUL DISTRICT	95	Àug 02
Pool 8 Isl, Phase I, WI	ST. PAUL DISTRICT	100	(Jun 93)
Pool 8 Isl, Phase II, WI	ST. PAUL DISTRICT	100	(Sep 99)
Pool 9 Isl Protection, WI	ST. PAUL DISTRICT	100	(Jun 95)
Pool 8 Isl, Phase III, WI	ST. PAUL DISTRICT	5	Nov 11
Pool Slough, IA/MN	ST. PAUL DISTRICT	55	Sep 03
Rice Lake, MN	ST. PAUL DISTRICT	100	(Nov 98)
Small Scale Drawdown, WI	ST. PAUL DISTRICT	100	(Sep 97)
Spring Lake, WI	ST. PAUL DISTRICT	100	(Nov 94)
Spring Lake Isl, WI	ST. PAUL DISTRICT	10	Sep 04
Trempealeau NWR, WI	ST. PAUL DISTRICT	100	(Sep 99)
Whitewater River, MN	ST. PAUL DISTRICT	2	Deffered
Lake Winneshiek, WI	ST. PAUL DISTRICT	0	Nov 12
Recreation		0	Unscheduled
Habitat Need Assessment		100	Sep 00

JUSTIFICATION: Implementation of the Upper Mississippi River System Environmental Management Program is essential to the continued viability of the Upper Mississippi River System and important to the long-term public acceptance and support of Upper Mississippi River System (UMRS) navigation. Habitat Rehabilitation and Enhancement projects help counteract the negative effects of natural and human-induced factors on the system's backwaters and side channels. Projects are selected for design and construction based on continued assessment of habitat restoration and enhancement opportunities as determined by the involved Federal and non-Federal partners. Long-Term Resource Monitoring provides data to indicate trends in key environmental parameters, analyzing sedimentation and other UMRS resource problems, and producing a spatial information database. An Economic Impacts of Recreation Study has been conducted to enable Federal and non-Federal management decisions to better consider impacts on recreation and the consequent changes in recreation-related expenditures in the local and regional economies.

<sup>&</sup>lt;sup>1</sup> Parenthesis indicate actual date.

### FISCAL YEAR 2003: The requested amount of \$12,200,000 will be applied as follows:

PROJECT	DISTRICT	AMOUNT	STATUS
Batchtown Mgmt Area, IL	ST. LOUIS DISTRICT	675,000	Continue Construction
Swan Lake, IL	ST. LOUIS DISTRICT	40,000	Complete Construction
Stone Dike Alterations MO/IL	ST. LOUIS DISTRICT	158,000	Continue Design
Pools 25 & 26, MO	ST. LOUIS DISTRICT	270,000	Continue Design
Salt Lake/Ft. Chartres SC, IL	ST. LOUIS DISTRICT	111,000	Continue Design
Reds Landing, IL	ST. LOUIS DISTRICT	167,000	Continue Design
Establishment Chute, MO	ST. LOUIS DISTRICT	150,000	Initiate Design
Turner Island, IL	ST. LOUIS DISTRICT	106,000	Initiate Design
Gardner Division, IL	ROCK ISLAND DISTRICT	100,000	Continue Construction
Lake Odessa, IA	ROCK ISLAND DISTRICT	100,000	Continue Design
Pool 11 Islands, WI	ROCK ISLAND DISTRICT	2,300,000	Continue Construction
Pool 12 Overwintering	ROCK ISLAND DISTRICT	100,000	Continue Design
Smith Creek,	ROCK ISLAND DISTRICT	100,000	Continue Design
Rice Lake, IA	ROCK ISLAND DISTRICT	100,000	Continue Design
Conway Lake, IA	ST. PAUL DISTRICT	60,000	Continue Design
Pool 8 Phase III, WI	ST. PAUL DISTRICT	30,000	Continue Design
Lake Winneshiek, WI	ST. PAUL DISTRICT	70,000	Complete Design
Ambrough Slough, WI	ST. PAUL DISTRICT	460,000	Complete Construction
Harpers Slough, WI	ST. PAUL DISTRICT	70,000	Continue Design
Pool Slough, IA	ST. PAUL DISTRICT	80,000	Complete Construction
Spring Lake Islands, WI	ST. PAUL DISTRICT	1,670,000	Continue Construction
Long Meadow Lake, MN	ST. PAUL DISTRICT	70,000	Initiate Design
Habitat Evaluation/Monitoring		426,000	Continue
Other Habitat		125,000	Continue
Public Involvement		65,000	Continue
Long Term Resource Monitoring		3,682,000	Continue
Independent Technical Advisory Committee		75,000	Continue
Report for Congress		300,000	Continue
Program Management		540,000	Continue
ТО	TAL	\$12,200,000	

Mississippi Valley Division

**Rock Island District** 

Upper Mississippi River System Environmental Management Program Illinois, Iowa, Minnesota, Missouri, and Wisconsin NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 and amended by Section 107(b) of the Water Resources Development Act of 1999, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay 25 percent of the first costs allocated to fish and wildlife enhancement for the following projects:  Banner Marsh, IL  Batchtown, IL  Blackhawk Park, WI  Bussey Lake, IA  Cuivre Island, MO  Osborne Channel, IL  Peoria Lake, IL  Princeton, IA  Swan Lake, IL	1,740,000 126,000 77,000 162,000 480,000 190,000 1,082,000 49,000 262,000	\$ 0
Subtotal  Pay 35 percent of the first costs allocated to fish and wildlife enhancement for the following projects:     Ambrough Slough, WI     Pool Slough, IA, MN     Rice Lake, IL     Smith Creek, IA	\$ 4,168,000 116,000 155,000 2,995,000 315,000 \$ 3,581,000	\$ 0 \$ 0
Pay 50 percent of the first costs allocated to recreation projects.	0 1	
Total Non-Federal Construction Costs	\$ 7,749,000	\$ 0

<sup>&</sup>lt;sup>1</sup> No recreation projects scheduled.

Mississippi Valley Division

**Rock Island District** 

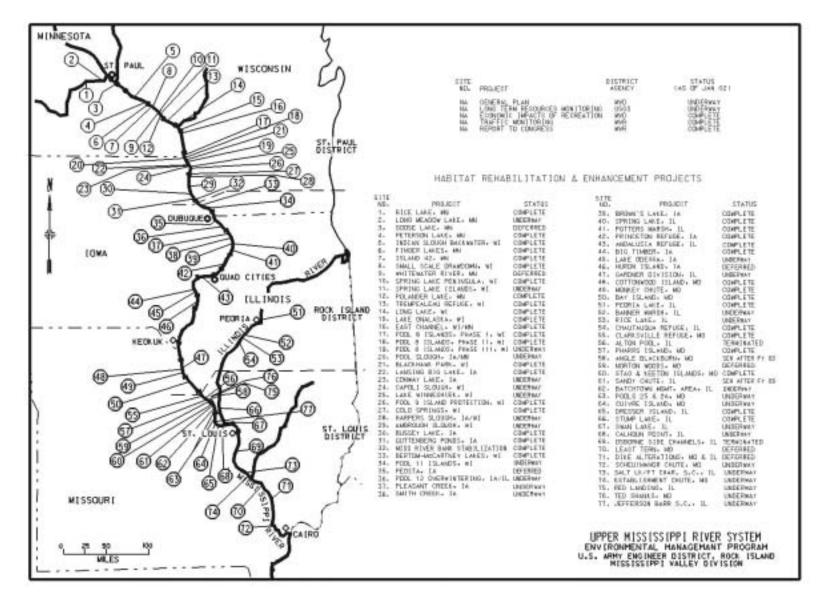
Upper Mississippi River System Environmental Management Program Illinois, Iowa, Minnesota, Missouri, and Wisconsin The non-Federal sponsors have agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement is required only for Program projects that are not located on lands managed as a national wildlife refuge.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$766,195,000 is the same as the latest estimate presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: National Environmental Policy Act compliance is accomplished prior to implementation of each individual project within the Program.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985. The scheduled project completion date of September 2020 has not changed since the last presented to Congress (FY 2002). The Water Resources Development Act of 1999, P.L. 106-53, amends the previous authority to increase annual appropriation limits available to the program; require submission of a report to Congress on a 6 year cycle beginning in December 2004 that evaluates programs, accomplishments, systemic habitat needs, and identifies any needed changes to the program authorization; and authorizes an independent technical advisory committee. Technical Advisory Committee was implemented in FY 2002.



Mississippi Valley Division

**Rock Island District** 

Upper Mississippi River System Environmental Management Program Illinois, Iowa, Minnesota, Missouri, and Wisconsin APPROPRIATION TITLE: Construction, General – Major Rehabilitation – Locks and Dams (Navigation)

PROJECT: Lock and Dam 24, Mississippi River, Illinois and Missouri (Major Rehabilitation) (Continuing)

LOCATION: Lock and Dam 24, is located in Calhoun County, Illinois, and Pike County, Missouri, at approximately Mile 273.5 above the mouth of the Ohio River in the vicinity of Clarksville, Missouri.

DESCRIPTION: The project plan provides for the rehabilitation of portions of the structure. The work will include replacement of miter gates, auxiliary lock closure structure, power distribution system, lock motors and controllers, control system, and miter gate machinery; addition of a protection cell, bendway weirs, and debris openings in the dam guard wall; repairs to several dam bridge columns; and rehabilitation of the lock landwall, intermediate wall, upstream and downstream guidewalls, dam tainter gates and anchorages, and the Illinois abutment. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1935, Water Resources Development Acts of 1986 and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1 at 8 percent (Rehabilitation Report, Part 1, June 1993); and 7 1/8 percent (Rehabilitation Report, Part 2, September 1997).

TOTAL BENEFIT-COST RATIO: 2.3 to 1 at 8 percent (Rehabilitation Report, Part 1, June 1993); 1.4 to 1 at 7 1/8 percent (Rehabilitation Report, Part 2, September 1997).

INITIAL BENEFIT-COST RATIO: 2.3 to 1 at 8 percent (FY 1996, Rehabilitation Report, Part 1, June 1993); 1.4 to 1 at 7 1/8 percent (FY 2000, Rehabilitation Report, Part 2, September 1997).

BASIS OF BENEFIT-COST RATIO: Based on two Major Rehabilitation Reports, Lock and Dam No. 24, Mississippi River, approved in June 1993 (Part 1, October 1992 price levels) and September 1997 (Part 2, October 1996 price levels). Benefit-cost ratio is a composite of all items analyzed for major rehabilitation.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost General Appropriation Inland Waterways Trust Fund	\$41,875,000 41,875,000	\$83,750,000		Entire Project	28	September 2008
Estimated Non-Federal Cost	41,070,000	0				
Total Estimated Project Cost		\$83,750,000				

SUMMARIZED FINANCIAL DATA (Continued)	GENERAL APPNS	INLAND WATERWAYS TRUST FUND	ACCUM PCT OF EST FED COST
Allocations to 30 September 2001	\$11,352,000	\$11,352,000	
Conference Allowance for FY 2002	4,019,000	4,019,000	
Allocation for FY 2002	4,126,000 <sup>1</sup>	4,126,000	
Allocations through FY 2002	15,478,000	15,478,000	37
Allocation Requested for FY 2003	5,000,000	5,000,000	49
Programmed Balance to Complete After FY 2003	21,397,000	21,397,000	
Unprogrammed Balance to Complete After FY 2003	. , 0	0	

#### PHYSICAL DATA

Lock: Major rehabilitation of the existing lock will include replacement of miter gates, power distribution system, motors, controllers, and machinery; construction of a protection cell, bendway weirs, and debris openings in the guard wall; and rehabilitation of existing lock landwall, intermediate wall, and downstream guidewalls.

Dam: Major rehabilitation of the existing dam lock will include replacement of power distribution and control systems and auxiliary lock closure structure and rehabilitation of bridge columns and Illinois abutment.

JUSTIFICATION: Lock and Dam 24 has been operating for over 50 years. While ordinary maintenance has been performed to keep the facility operating, the wear and tear on some items is beyond ordinary maintenance. To provide an acceptable level of reliability, major rehabilitation of various structural, electrical, and mechanical components of the facility must be undertaken. The average annual benefits, all navigation, are \$4,735,000 (Rehabilitation Report, Part 1, June 1993) and \$5,384,000 (Rehabilitation Report, Part 2, September 1997).

<sup>&</sup>lt;sup>1</sup> Reflects \$1,286,000 reduction assigned as savings and slippage and \$1,500,000 reprogrammed to the project. (50/50 Construction, General, and Inland Waterways Trust Fund.)

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue: Lock Concrete Rehabilitation	\$8,750,000
Planning, Engineering and Design	450,000
Supervision and Administration	800,000
Total	\$10,000,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

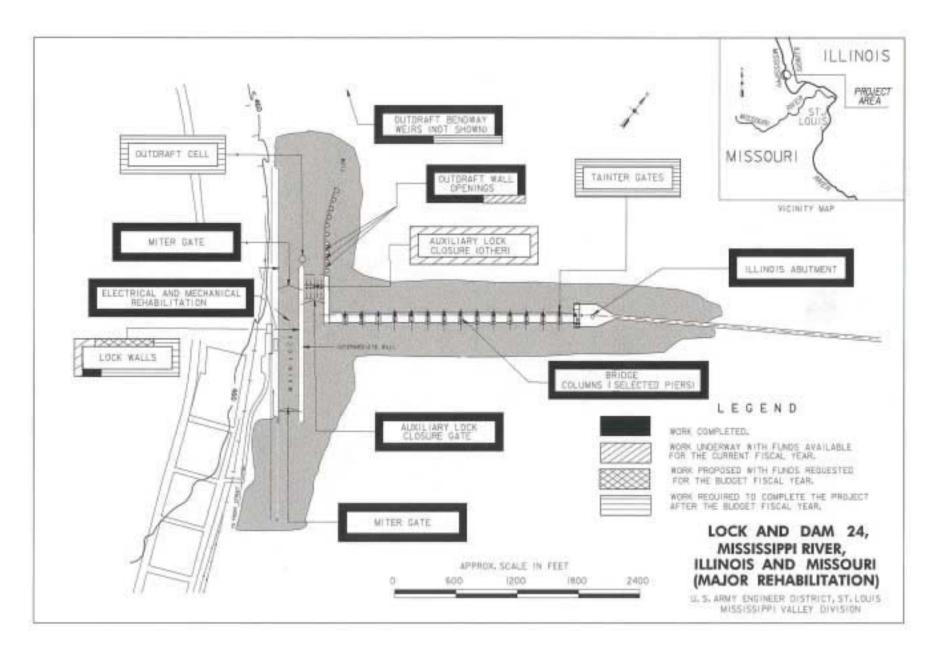
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$83,750,000 is an increase of \$15,158,000 from the latest estimate (\$68,592,000) submitted to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	\$ 482,000 14,676,000
Total	\$ 15,158,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Two environmental assessments were conducted. Each one resulted in a Finding of No Significant Impact; the first one was signed 1 February 1993 and the second, 5 March 1997. The rehabilitation reports were coordinated with the U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, and the Missouri and Illinois Departments of Conservation. The U.S. Fish and Wildlife Service concurred with the biological assessments contained in the environmental assessments.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1996. The scheduled completion date of September 2008 for programmed work is a slippage from the latest completion date of September 2007 presented to Congress (FY 2002). This change is due to constrained funding ceilings.

The project requires no mitigation.



APPROPRIATION TITLE: Construction, General – Major Rehabilitation – Locks and Dams (Navigation)

PROJECT: Lock and Dam 11, Mississippi River, Iowa (Major Rehabilitation) (Continuing)

LOCATION: The project is located at Mississippi River Mile 583.0, in Dubuque, Dubuque County, Iowa. The facility is a unit of the Inland Waterway Navigation System of the Upper Mississippi River Basin and is one of twenty-nine such facilities between Minneapolis, Minnesota, and St. Louis, Missouri.

DESCRIPTION: The lock chamber is 600 feet long by 110 feet wide and has a maximum lift of 11 feet. An auxiliary lock is located adjacent to the lowa side of the channel. The dam is 5,018-feet long and consist of a 1,278-foot gated section, a 200-foot long storage yard, and the remaining 3,540 feet is a non-overflow earth dike. Significant features of the work include miter gate electrical systems replacement, miter gate and tainter valve machinery replacement, miter gate anchorage bar replacement, culvert valve rehabilitation, dam tainter gate chain replacement, and additional scour protection above and below the dam.

AUTHORIZATION: River and Harbor Act of 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 9.3 to 1 at 6-3/8 percent.

TOTAL BENEFIT-COST RATIO: 9.3 to 1 at 6-3/8 percent

BASIS OF BENEFIT-COST RATIO: The Mississippi River, Dubuque, Iowa, Lock and Dam No. 11 Rehabilitation Evaluation Report, dated March 1999, revised May 1999, and submitted to HQUSACE for approval on 19 May 1999, at October 2001 price levels.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost General Appropriations Inland Waterways Trust Fund	\$ 26,200,000 <sup>1</sup> 13,100,000 13,100,000	Entire Project	0	30 Sep 2007
Estimated Non-Federal Cost Total Estimated Project Cost	0 \$26,200,000	PHYSICAL DATA		
, and the second		Scour Protection – place roo of dam (125 ft) and upstread Lock Rehabilitation – 600 fe Feet wide. Dam Rehabilitation – 849 fe and 7,520 feet rock and ear	m (65 feet). et long x 110 et gated section	

DI 13 (OLO AL

<sup>&</sup>lt;sup>1</sup> Based on Rehabilitation Evaluation Report dated May 1999 in the amount of \$21,900,000 (Major Rehabilitation only). The estimate was updated to October 2001 price levels and an estimated inflation allowance through the construction period was applied.

Mississippi Valley Division

Rock Island District

Lock and Dam 11, Mississippi River,

SUMMARIZED FINANCIAL DATA (Continued)	GENERAL APPROPRIATIONS	INLAND WATERWAYS TRUST FUND	ACCUM PCT OF EST FED COST
Allocations to 30 September 2001 Conference Allowance for FY 200 Allocation for FY 2002 Allocations through FY 2002	\$ 0 250,000 210,000 210,000	\$ 0 250,000 210,000 210,000	2
Allocation for FY 2003 Programmed Balance to Complete after FY 2003 Unprogrammed Balance to Complete after FY 2003	683,000 12,207,000	683,000 12,207,000	7

JUSTIFICATION: The Upper Mississippi River is a vital segment of the United States Inland Waterway Navigation System, serving as an economical transportation link from the Upper Midwest to the lower Mississippi River and the Gulf of Mexico. The Upper Mississippi River is essential to several of the most important economic sectors in the nation; namely agriculture, construction, and energy. The continued operation and maintenance of the locks and dams on the Upper Mississippi River in a safe and reliable mode is of sound economic importance.

Lock and Dam No. 11 was placed into operation in 1937, and has performed very well in the intervening 62 years of service. However, reliability and operational problems are occurring that have significant impacts to the navigation users of the Upper Mississippi River. These impacts, in the form of service disruptions leading to stalls and delays in traffic, result in increased transportation costs for grain, coal, petroleum products, and other bulk commodities. As stewards of inland navigation, the U.S. Army Corps of Engineers is addressing these reliability problems to ensure the lock and dam system continues satisfactory operations for current levels of traffic on the Upper Mississippi River.

The existing lock mechanical and electrical systems are original equipment installed in the 1930's. Most of the electrical components are not in compliance with the National Electric Code, and operation of the equipment is becoming a safety concern. Operation and maintenance costs will be increasing with a continued decrease in the reliability. The lock mechanical systems are the most critical components in keeping the lock operational. Loss of function of these systems could reduce the efficiency of the lock by 60 percent. Spare parts for these machinery systems are also becoming increasingly difficult to obtain. The miter gate anchorages are original components that have experienced fatigue failures at other lock sites. Failure of these anchorages could shut down the lock for an extended period. Failure of the culvert valves that control entry and exit of water for the lock could reduce the efficiency or in some cases shut down the lock for an extended period. Corrosion of the dam tainter gate chains cause them to become stiff and difficult to pass over the chain sprockets. Failure of these chains at other dam sites has resulted in uncontrolled flow through the gate opening. Changes in design and operating criteria require the placement of additional scour protection above and below the dam. The additional protection will provide more reliable service for various water control scenarios.

Additional rehabilitation work will be accomplished utilizing the Operation and Maintenance-Major Maintenance Program. These items include the miter gates, auxiliary miter gates, electrical distribution system, lock concrete, dam roller and tainter gates, dam roller chains, dam concrete, dam service bridge and lock bubbler systems. Lock tonnage figures for the last eleven years are as follows:

Year	Tonnage	Year	Tonnage	Year	Tonnage	Year	Tonnage
2000	20,756,882	1997	18,618,000	1994	16,128,000	1991	18,768,000
1999	22,505,000	1996	19,674,000	1993	13,186,000	1990	20,435,000
1998	20 333 000	1995	19 268 000	1992	20 648 000		

FISCAL YEAR 2003: The requested amount of \$1,366,000 will be applied as follows:

#### Continue:

Stage I, Scour Protection	\$1,100,000
Stage II, Lock Rehabilitation	100,000
Planning, Engineering, and Design	76,000
Supervision and Administration	90,000

Total \$1,366,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

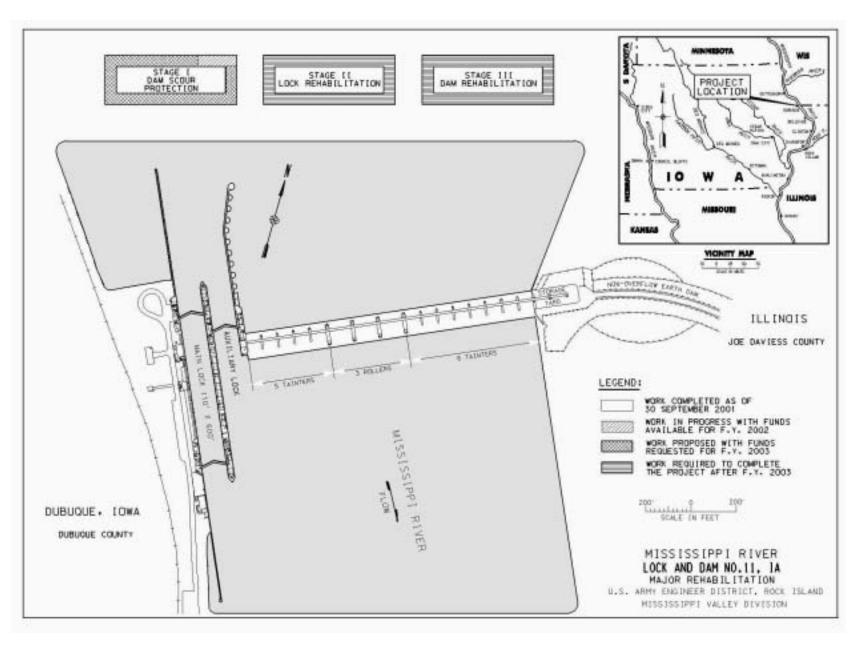
STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$26,200,000 is an increase of \$1,600,000 from the latest estimate, \$24,600,000 presented to Congress (FY 2001). This change includes the following item:

Item	Amount
Price escalation on construction features	\$1,600,000
Total	\$1,600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was distributed for public review in April 1996. A Finding of No Significant Impact was signed in August 1997.

OTHER INFORMATION: Operations and Maintenance, General, funds were allocated to initiate and complete the Rehabilitation Evaluation Report. Funds to initiate construction were appropriated in FY 2002.



APPROPRIATION TITLE: Construction, General - Major Rehabilitation - Locks and Dams (Navigation)

PROJECT: Lock and Dam 12, Mississippi River, Iowa (Major Rehabilitation) (Continuing)

LOCATION: The project is located at Mississippi River Mile 556.7, near the City of Bellevue, in Jackson County, Iowa. The facility is a unit of the Inland Waterway Navigation System of the Upper Mississippi River Basin and is one of twenty-nine such facilities between Minneapolis, Minnesota, and St. Louis, Missouri.

DESCRIPTION: The lock chamber is 600 feet long by 110 feet wide and has a maximum lift of 9 feet. An auxiliary lock is located adjacent to the lowa side of the channel. The dam is 8,369-feet long and consists of a 849-foot gated section. The remaining 7,520 is an earth and rock dike section. Significant features of the work include miter gate electrical systems replacement, miter gate and tainter valve machinery replacement, miter gate anchorage bar replacement, culvert valve rehabilitation, dam tainter gate chain replacement, and additional scour projection above and below the dam. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1930, Water Resources Development Acts of 1986 and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 17.5 to 1 at 7-1/8 percent.

INITIAL BENEFIT-COST RATIO: 4.5 to 1 at 7-1/8 percent. (FY 2000)

TOTAL BENEFIT-COST RATIO: 4.9 to 1 at 7-1/8 percent.

BASIS OF BENEFIT-COST RATIO: The Mississippi River, Bellevue, Iowa, Lock and Dam No. 12 Rehabilitation Evaluation Report, dated March 1998 (March 1998 price levels) and approved by HQUSACE on 30 June 1998.

SUMMARIZED FINANCIAL DATA		STATUS: (1 Jan	2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost General Appropriations Inland Waterways Trust Fund Estimated Non-Federal Cost Total Estimated Project Cost	\$ 14,700,000	Entire Project		45	September 2003
	GENERAL APPROPRIATIONS	INLAND WATERWAYS TRUST FUND	ACCUM PCT OF EST FED COST		
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002	\$2,587,000 2,453,000 2,061,000 4,648,000	\$2,587,000 2,453,000 2,061,000 4,648,000	2 63		
Allocation Requested for FY 2003 Programmed Balance to Complete after FY 2003 Unprogrammed Balance to Compete after FY 2003	2,702,000 0 0	2,702,000 0 0	100		

#### PHYSICAL DATA

Scour Protection – place rock downstream of dam (125 ft) and upstream (65 feet).

Lock Rehabilitation – 600 feet long x 110 feet wide.

Dam Rehabilitation – 849 feet gated section and 7,520 feet rock and earthen section.

<sup>&</sup>lt;sup>1</sup> Based on Rehabilitation Evaluation Report dated March 1998 in the amount of \$13,562,000 (Major Rehabilitation only). The estimate was updated to October 2001 price levels and an estimated inflation allowance through the construction period was applied.

<sup>&</sup>lt;sup>2</sup> Reflects \$784,000 reduction assigned as savings and slippage.

JUSTIFICATION: The Upper Mississippi River is a vital segment of the United States Inland Waterway Navigation System, serving as an economical transportation link from the Upper Midwest to the lower Mississippi River and the Gulf of Mexico. The Upper Mississippi River is essential to several of the most important economic sectors in the nation; namely agriculture, construction, and energy. The continued operation and maintenance of the locks and dams on the Upper Mississippi River in a safe and reliable mode is of sound economic importance.

Lock and Dam No. 12 was placed into operation in 1939, and has performed very well in the intervening 62 years of service. However, reliability and operational problems are occurring that have significant impacts to the navigation users of the Upper Mississippi River. These impacts, in the form of service disruptions leading to stalls and delays in traffic, result in increased transportation costs for grain, coal, petroleum products, and other bulk commodities. As stewards of inland navigation, the U.S. Army Corps of Engineers is addressing these reliability problems to ensure the lock and dam system continues satisfactory operations for current levels of traffic on the Upper Mississippi River.

The existing lock mechanical and electrical systems are original equipment installed in the 1930's. Most of the electrical components are not in compliance with the National Electric Code, and operation of the equipment is becoming a safety concern. Operation and maintenance costs will be increasing with a continued decrease in the reliability.

The lock mechanical systems are the most critical components in keeping the lock operational. Loss of function of these systems could reduce the efficiency of the lock by 60 percent. Spare parts for these machinery systems are also becoming increasingly difficult to obtain. The miter gate anchorages are original components that have experienced fatigue failures at other lock sites. Failure of these anchorages could shut down the lock for an extended period. Failure of the culvert valves that control entry and exit of water for the lock could reduce the efficiency or in some cases shut down the lock for an extended period. Corrosion of the dam tainter gate chains has caused them to become stiff and difficult to pass over the chain sprockets. Failure of these chains at other dam sites has resulted in uncontrolled flow through the gate opening. Changes in design and operating criteria require the placement of additional scour protection above and below the dam. The additional protection will provide more reliable service for various water control scenarios.

Additional rehabilitation work will be accomplished utilizing the Operation and Maintenance, General, Major Maintenance Program. These items include the miter gates, auxiliary miter gates, electrical distribution system, lock concrete, dam roller and tainter gates, dam roller chains, dam concrete, dam service bridge, and lock bubbler systems. Lock tonnage figures for the last twelve years are as follows:

Year	Tonnage	Year	Tonnage	Year	Tonnage	Year	Tonnage
2000	22,280,448	1997	20,226,000	1994	17,120,000	1991	22,050,000
1999	24,426,919	1996	22,141,000	1993	14,340,000	1990	24,703,000
1998	21,596,000	1995	21,213,000	1992	24,301,000	1989	21,087,000

The average annual benefits, all navigation, are \$6,499,800.

FISCAL YEAR 2003: The requested amount of \$5,404,000 will be applied as follows:

Continue:	
Stage II, Lock Rehabilitation	\$ 1,130,000
Stage III, Dam Rehabilitation	3,360,000
Planning, Engineering, and Design	440,000
Supervision and Administration	474,000
Total	\$ 5,404,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

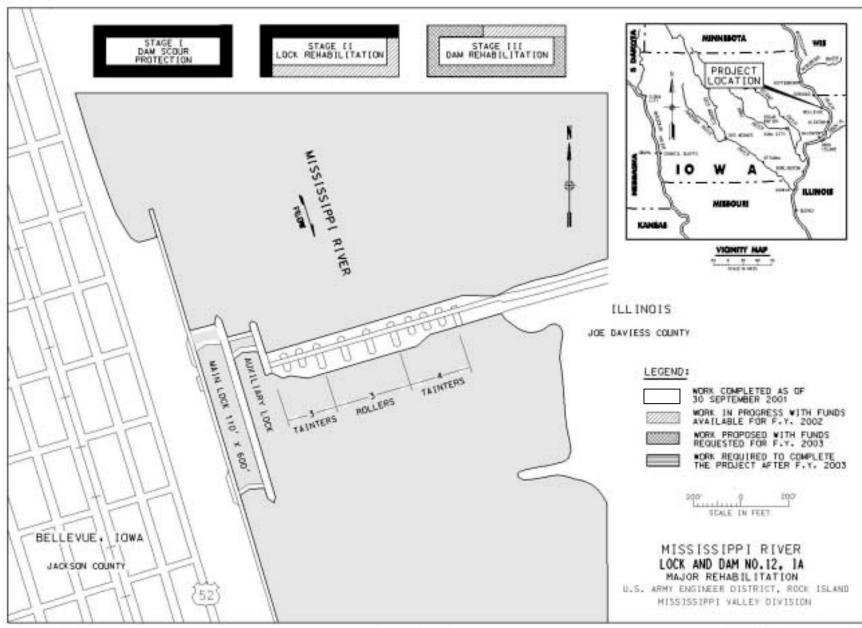
STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$14,700,000 is a decrease of \$300,000 from the last estimate \$15,000,000 presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	\$ 386,000 - 686,000
Total	\$-300,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was distributed for public review in April 1997. A Finding of No Significant Impact was signed in August 1997.

OTHER INFORMATION: Operations and Maintenance, General, funds were allocated to initiate and complete the Rehabilitation Evaluation Report. Funds to initiate construction were appropriated in FY 2000.



Mississippi Valley Division

**Rock Island District** 

Lock and Dam 12, Mississippi River, Iowa (Major Rehabilitation)

APPROPRIATION TITLE: Construction, General - Major Rehabilitation - Locks and Dams (Navigation)

PROJECT: Lock and Dam No. 3, Mississippi River, Minnesota (Major Rehabilitation) (Continuing)

LOCATION: Lock and Dam 3 is located on the Mississippi River 56 miles downstream of Minneapolis, Minnesota, and 6 miles upstream of Red Wing, Minnesota, in Goodhue County.

DESCRIPTION: The embankments at Lock and Dam 3 consist of the main embankment and an extensive system of spot dikes on both the Minnesota and Wisconsin sides of the river. The main embankment is subject to overtopping and severe damage during major flood events. The system of spot dikes on the Wisconsin side, which maintains the pool, were designed for overtopping and to provide flood flow discharge capacity. These spot dikes are deteriorating at an accelerating rate because of deterioration of associated downstream private dikes. Periodic maintenance on the spot dikes has prevented failure of the system to date. Seepage paths through the structure have developed and deteriorating grouted riprap is crumbling leaving the structures subject to erosion during major flood flows. If high water erodes the dikes, loss of pool 3 could result. This would not only curtail navigation, but would cause severe environmental and economic problems and damage. Repair of the entire dike system is vital to navigation and environmental interests and a nuclear power plant that rely on maintenance of pool 3. An ongoing reevaluation study is evaluating alternatives to address navigation and embankment issues. (See Other Information.) All work is programmed.

AUTHORIZATION: River and Harbor Act of 1930, Water Resources Development Acts of 1986 and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: Being reevaluated.

INITIAL BENEFIT-COST RATIO: Being reevaluated.

TOTAL BENEFIT-COST RATIO: Being reevaluated.

BASIS OF BENEFIT-COST RATIO: Being reevaluated.

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2002)	PCT CMPL	COMPLETION SCHEDULE
Estimated Federal Cost General Appropriations Inland Waterways Trust Fund	\$20,000,000 \$ 10,000,000 10,000,000	Entire Project	2	September 2006
Estimated Non-Federal Cost	0		PHYSICAL DATA	
Total Estimated Project Cost	\$20,000,000	Embankments	6,900 ft	

Mississippi Valley Division

St. Paul District

Lock and Dam 3, Mississippi River, Minnesota (Major Rehabilitation)

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4 February 2002

232

SUMMARIZED FINANCIAL DATA (Continued)	CONSTRUCTION,	INLAND	ACCUM
	GENERAL	WATERWAYS	PCT OF EST
	APPROPRIATIONS	TRUST FUND	FED COST
Allocations to 30 September 2001	\$ 1,387,000	\$ 1,387,000	17
Conference Allowance for FY 2002	400,000	400,000	
Allocation for FY 2002	336,000 <sup>1</sup>	336,000	
Allocations through FY 2002	1,723,000	1,723,000	
Allocation Requested for FY 2003 Programmed Balance to Complete after FY 2003 Unprogrammed Balance to Complete after FY 2003	1,500,000 6,777,000 0	1,500,000 6,777,000 0	32

JUSTIFICATION: The standard project flood is used as the design discharge for major rehabilitation projects because failure of these dams would result in severe economic loss for the Upper Midwest. Under the standard project flood conditions, the peak discharge is 305,000 cfs. Dam 3 is capable of discharging a maximum of 93,000 cfs, leaving the peak discharge of 212,000 cfs or 78,000 over the design parameters used to design the lock and dam 3 structure. This condition creates the potential for overtopping of the dike system by 5.3 feet. Because the dikes were not designed for this degree of exposure, modifications are required to protect the dike and prevent the probable failure of the embankment system if left unprotected. Annual navigation benefits total \$1,902,000. This project addresses the spot dike problems on the Wisconsin side of the river only.

FISCAL YEAR 2003: The requested total amount of \$3,000,000 will be applied as follows:

Continue Construction	\$ 2,600,000
Planning, Engineering and Design	225,000
Supervision and Administration	175,000
Total	\$ 3,000,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

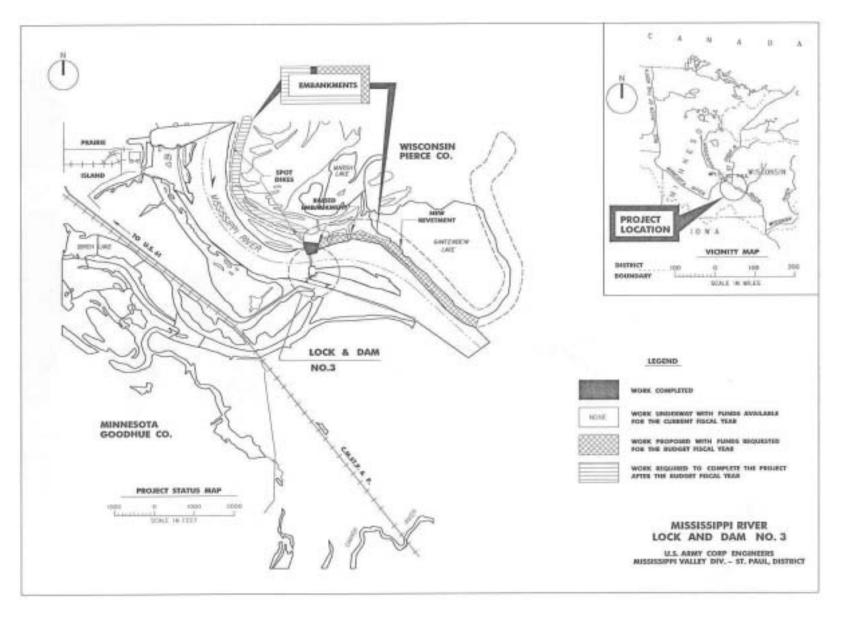
<sup>&</sup>lt;sup>1</sup> Reflects \$128,000 reduction assigned as savings and slippage (50 percent Construction, General, and 50 percent Inland Waterways Trust Fund).

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$20,000,000 is an increase of \$1,200,000 over the latest estimate (\$18,800,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Design Changes	\$ 600,000 600,000
Total	\$1,200,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Notice of Intent to prepare an Environmental Impact Statement (EIS) was published in the Federal Register in August 2000. An interagency study team has been formed and is actively participating in alternatives analysis and plan formulation. The scoping process is nearly complete.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1993 under the Operations and Maintenance, General, Appropriation. Construction was initiated in Fiscal Year 1998. A small construction contract was completed for the embankments project in 1999. The remainder of the project was stopped when endangered mussel species were found. A separate project was formulated for navigation safety to correct for an outdraft current that tends to sweep down bound tows toward the gated dam. The recommended plan for the navigation safety project was a 1,230 foot long ported guard wall in the river upstream and between the lock and gated dam. Participating agencies and the towing industry believe the outdraft issue needs to be resolved to reduce barge accidents and the potential for a toxic spill. The agencies have also requested that the two projects be combined. Because solving the outdraft may reduce the risk of embankment failure, combining the projects may lead to a less conservative embankment plan which could reduce environmental impacts and lower the cost of the embankments portion of the project. The project is being reevaluated to include the navigation safety component in addition to the embankments component. A draft reevaluation report is scheduled for completion in October 2002. The scheduled completion date for programmed work has slipped from September 2005 to September 2006 due to constrained budget ceilings.



Mississippi Valley Division

St. Paul District

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 1. Navigation

### a. Channels and Harbors

The budget estimate of \$140,456,000 provides for essential operation and maintenance on 26 channel projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

	ESTIMATED C	<u>DBLIGATIONS</u>	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
<u>Arkansas</u>			
Halama Hawkay	F4C 000	22.000	
Helena Harbor	546,000	23,000	4. None
	(25,000)	(23,000)	1. None.
	(521,000)	(0)	2. None.
Osceola Harbor	504,000	21,000	
	(24,000)	(21,000)	1. Variation in survey requirements.
	(480,000)	(0)	2. None.
	(100,000)	(0)	2. 1101101
White River	1,682,000	195,000	
	(195,000)	(195,000)	1. None.
	(1,487,000)	(0)	2. None.
	, , ,	( )	
Yellow Bend Port	145,000	10,000	
	(15,000)	(10,000)	Variation in survey requirements.
	(130,000)	(0)	2. None.
<u>Kentucky</u>	,	` '	
Elvio Stohr Harbor	460,000	10.000	
Elvis Stahr Harbor	460,000	19,000	4. Maniation in augustus magninama anta
	(21,000)	(19,000)	Variation in survey requirements.
	(439,000)	(0)	2. None.
		4 February 2002	236

4 February 2002

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED C	BLIGATIONS .	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	<ol> <li>Reasons for Change in Operations from FY 2002 and FY 2003</li> </ol>
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Louisiana			
Louisiana			
Atchafalaya River,	13,181,000	14,681,000	
Bayous Chene,	(676,000)	(931,000)	Variation in survey requirements.
Boeuf and Black	(12,505,000)	(13,750,000)	2. Dredging.
	700.000	4 00 = 000	
Bayou LaFourche	730,000	1,085,000	4. 11
And LaFourche	(0)	(0)	1. None.
Jump Waterway	(730,000)	(1,085,000)	2. Dredging.
Calcasieu River	12,773,000	15,852,000	
Calcacica i tivoi	(1,063,000)	(932,000)	Variation in water management activities and survey
	(1,222,222)	(,)	requirements.
	(11,710,000)	(14,920,000)	2. Dredging.
Freshwater Bayou	1,595,000	1,443,000	
	(0)	(1,188,000)	Variation in operation activities.
	(1,595,000)	(255,000)	2. Variation in structural maintenance requirements and dredging.
Gulf Intracoastal Waterway	18,195,000	19,129,000	
Our miracoastar vvaterway	(8,477,000)	(8,930,000)	1. None.
	(9,718,000)	(10,199,000)	2. None.
	(0,1.10,000)	(10,100,000)	
Houma Navigation Canal	3,343,000	3,223,000	
, and the second	(73,000)	(172,000)	Variation in survey requirements.
	(3,270,000)	(3,051,000)	2. None.
		•	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED OF	<u>BLIGATIONS</u>	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
<u>Project Name</u>	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Lake Providence	593,000	20,000	
	(26,000)	(20,000)	1. Variation in survey requirements.
	(567,000)	(0)	2. Dredging.
Madison Parish Port	116,000	5,000	
	(13,000)	(5,000)	Variation in survey requirements.
	(103,000)	(0)	2. None.
Mississippi River	55,831,000	57,482,000	
Baton Rouge to	(6,511,000)	(7,351,000)	Continue Hydrographic Survey Book.
Gulf of Mexico	(49,320,000)	(50,131,000)	2. Dredging.
Mississippi River	13,111,000	13,061,000	
- Gulf Outlet	(311,000)	(521,000)	Variation in survey requirements.
	(12,800,000)	(12,540,000)	2. None.
Mississippi River			
Outlets at Venice	1,937,000	80,000	
	(0)	(80,000)	Variation in operation activities.
	(1,937,000)	(0)	2. Dredging.
Minnesota			
Minnesota River	130,000	130,000	
	(0)	(0)	1. None.
	(130,000)	(130,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	<ol><li>Major Maintenance Items Budgeted in FY 2003</li></ol>
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
<u>Mississippi</u>			
Claiborne County	138,000	8,000	
Port	(8,000)	(8,000)	1. None.
	(130,000)	(0)	2. None.
	, ,	( )	
Mouth of Yazoo River	138,000	25,000	
	(26,000)	(25,000)	1. None.
	(112,000)	(0)	2. None.
B	0.4.4.000	45.000	
Rosedale Harbor	641,000	15,000	4. Variation in aumouver manifestante
	(21,000) (620,000)	(15,000)	<ol> <li>Variation in survey requirements.</li> <li>None.</li> </ol>
Yazoo River, MS	111,000	(0) 15,000	Z. None.
razoo raver, ivio	(15,000)	(15,000)	1. None.
	(96,000)	(13,000)	2. None.
	(00,000)	(0)	2. (1010.
<u>Missouri</u>			
Caruthersville Harbor	188,000	21,000	
	(24,000)	(21,000)	1. Variation in survey requirements.
	(164,000)	(0)	2. None.
Mississippi River	13,008,000	13,878,000	
Between Ohio &	(4,473,000)	(3,798,000)	Variation in dredge surveys and labor costs.
Missouri Rivers	(8,535,000)	(10,080,000)	Dredging and dike construction.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
New Madrid Harbor	290,000	16,000	
	(19,000)	(16,000)	1. Variation in survey requirements.
	(271,000)	(0)	2. None.
Southeast MO Port	390,000	0	
	(0)	(0)	1. None.
	(390,000)	(0)	2. None.
<u>Tennessee</u>			
Wolf River Harbor	562,000	19,000	
	(20,000)	(19,000)	1. None.
	(542,000)	(0)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED C	BLIGATIONS	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
TOTAL - Channels	140,338,000	140,456,000	
and Harbors	(22,036,000)	(24,345,000)	
	(118,302,000)	(116,141,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 1. Navigation (Cont'd)

### b. Locks and Dams

The program request of \$150,760,000 provides for the Operation and Maintenance requirements of thirteen canalized waterways including the Illinois Waterway and Mississippi River projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials and parts for day-to-day functioning, and periodic maintenance, repairs, and replacements.

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	<ol> <li>Reasons for Change in Operations from FY 2002 and FY 2003</li> </ol>
	Total	Total	(10%+/).
<u>Project Name</u>	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
<u>Arkansas</u>			
Ouachita and Black	6,879,000	6,491,000	
Rivers, AR and LA	(5,325,000)	(6,408,000)	Increased effective rates and new policy charging departmental overhead to field.
	(1,554,000)	(83,000)	2. None.
<u>Illinois</u>			
St. Louis District	1,611,000	1,683,000	
Illinois Waterway	(397,000)	(414,000)	1. None.
	(1,214,000)	(1,269,000)	2. Dredging.
Rock Island District	21,881,000	25,154,000	
Illinois Waterway	(12,603,000)	(13,986,000)	Increase in operation cost.
•	(9,278,000)	(11,168,000)	Replace wicket lifter Peoria Lock and Dam.
Kaskaskia River	1,653,000	1,386,000	
	(1,112,000)	(1,136,000)	1. None.
	(541,000)	(250,000)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
STATE	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Illinois, Iowa, Minnesota, Missouri and Wisconsin			
St. Louis District			
Mississippi River between	14,433,000	15,443,000	
Missouri River &	(5,449,000)	(5,677,000)	1. None.
Minneapolis	(8,984,000)	(9,766,000)	<ol><li>Dredging, construct dike and revetment, replace Lock 24 culvert valves.</li></ol>
Rock Island District			
Mississippi River between	42,431,000	41,820,000	
Missouri River &	(20,435,000)	(22,758,000)	1. Variation in periodic inspection and dam safety study.
Minneapolis	(21,996,000)	(19,062,000)	2. Dredging.
·	, , ,	, , , ,	
St. Paul District			
Mississippi River between	41,794,000	45,405,000	
Missouri River &	(19,840,000)	(19,809,000)	1. None.
Minneapolis	(21,954,000)	(25,596,000)	2. Includes Major Rehabilitation at Locks and Dams 3, 5A-9 for \$2,248,000 (See justification following this table); L/D 8 Lockwork, Stage 2, Building, Site and Control; L/D 9 Lockwork, Stage 2, Building, Site and Control; L/D's 6, sandblast and paint dam gates; L/D 6, Fixed Crest Spillway Repair; L/D 3, Correct Outdraft Condition; L/D LSAF Dewatering/Concrete Repairs. L/D 10, Lockwork, Stage 2, Building, Site and Control; and L/D 1 Amberson Dam Rehabilitation.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED (	OBLIGATIONS .	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
Duning of Marina	Total	Total	(10%+/).
Project Name	(Operations) (Maintenance)	(Operations) (Maintenance)	<ol><li>Major Maintenance Items Budgeted in FY 2003 (Threshold \$500,000)</li></ol>
	(Maintenance)	(iviairiteriarice)	(Tillesiloid \$300,000)
<u>Louisiana</u>			
Bayou Teche	0	0	
	(0)	(0)	1. None.
	(0)	(0)	2. None.
Bayou Teche and	0	0	
Vermilion River	(0)	(0)	1. None.
	(0)	(0)	2. None.
Mermentau River	933,000	1,280,000	
	(933,000)	(1,080,000)	1. Variation in water management activities.
	(0)	(200,000)	2. None.
Red River Waterway,	10,837,000	7,297,000	
Mississippi River to	(5,963,000)	(7,229,000)	1. Variation in operations cost.
Shreveport, LA	(4,874,000)	(68,000)	2. None.
<u>Minnesota</u>			
Reservoirs at Headwaters	4,017,000	4,513,000	
Mississippi River	(3,319,000)	(3,270,000)	1. None.
	(698,000)	(1,243,000)	2. None.
Mississippi			
Pearl River, MS and LA	242,000	288,000	
	(242,000)	(288,000)	1. Variation in operations cost.
	(0)	(0)	2. None.
		4 February 2002	24

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED (	DBLIGATIONS	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
TOTAL - Locks	146,711,000	150,760,000	
and Dams	(75,618,000)	(82,055,000)	
	(71,093,000)	(68,705,000)	
TOTAL - Navigation	287,049,000 (97,654,000) (189,395,000)	291,216,000 (106,370,000) (184,846,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

### 2. Flood Control

### a. Reservoirs

The program request of \$31,838,000 for the Operation and Maintenance of twenty flood control reservoir projects providing the amount necessary for operation requirements. Annual requirements are for the necessary operation and ordinary maintenance of project facilities; labor, supplies, materials and parts required for day-to-day functioning of the projects; and contact law enforcement. The requested amount also applications of special recreation user fees for recreation areas.

	ESTIMATED C	BLIGATIONS	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
<u>Illinois</u>			
Carlyle Lake	4,301,000	4,856,000	
Carryle Lake	(2,786,000)	(2,889,000)	1. None.
	(1,515,000)	(1,967,000)	2. None.
	(1,010,000)	(1,001,000)	2. 10110.
Farm Creek	170,000	204,000	
	(42,000)	(48,000)	Variation in periodic inspections.
	(128,000)	(156,000)	2. None.
Lake Shelbyville	5,133,000	5,073,000	
	(2,754,000)	(2,933,000)	1. None.
	(2,370,000)	(2,140,000)	Initiate construction shoreline restoration Phase IIB.
Rend Lake	4,210,000	4,520,000	
Nona Lake	(2,378,000)	(2,331,000)	1. None.
	(1,832,000)	(2,189,000)	Variation in recreation maintenance.
	(1,002,000)	(2,100,000)	2. Variation in root outfort maintenance.
Union Lake	12,000	10,000	
	(12,000)	(10,000)	1. Variation in operational labor cost.
	(0)	(0)	2. None.
	( )	( )	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

## 2. Flood Control (Cont'd)

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	<ol> <li>Reasons for Change in Operations from FY 2002 and FY 2003</li> </ol>
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Levis			
<u>lowa</u>			
Coralville Lake	2,735,000	(3,097,000)	
	(2,053,000)	(2,194,000)	1. None.
	(682,000)	(903,000)	2. None.
	, ,	, ,	
Red Rock Dam -	5,182,000	3,609,000	
Lake Red Rock	(2,262,000)	(2,234,000)	1. None.
	(2,920,000)	(1,375,000)	2. None.
Saylorville Lake	3,887,000	4,088,000	
Saylor ville Lake	(3,143,000)	(3,322,000)	1. None.
	(3,143,000)	(3,322,000)	2. None.
	(744,000)	(700,000)	Z. None.
Louisiana			
Bayou Bodcau Reservoir	637,000	794,000	
	(543,000)	(725,000)	Variation in operational cost.
	(94,000)	(69,000)	2. None.
Caddo Lake	89,000	166,000	
Caudo Lake	(89,000)	(166,000)	Variation in operational cost.
		•	2. None.
	(0)	(0)	Z. NOTIG.
Wallace Lake	150,000	180,000	
	(147,000)	(178,000)	Variation in operation cost.
	(3,000)	(2,000)	2. None.
	, , ,	· · /	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items		
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003		
	Total	Total	(10%+/).		
<u>Project Name</u>	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003		
	(Maintenance)	(Maintenance)	(Threshold \$500,000)		
<u>Minnesota</u>					
Big Stone Lake - Whetstone	238,000	274,000			
River	(238,000)	(274,000)	1. Increase due to scheduled revision Project Reservoir Regulating		
	, , ,	( , ,	Manual.		
	(0)	(0)	2. None.		
Lac Qui Parle Lake	621,000	1,031,000			
	(529,000)	(632,000)	Scheduled periodic inspections.		
	(92,000)	(399,000)	2. None.		
Lake Traverse, MN & SD	712,000	504,000			
Eake Traverse, Wild & OB	(569,000)	(504,000)	1. Variation in operation cost.		
	(143,000)	(0)	2. None.		
	(112,222)	(-)			
Orwell Lake	539,000	481,000			
	(387,000)	(351,000)	1. None.		
	(152,000)	(130,000)	2. None.		
B 11 1 B	070.000	100.000			
Red Lake Reservoir	372,000	126,000	1. Variation in noviedia inconstituta		
	(146,000) (226,000)	(126,000) 0	<ol> <li>Variation in periodic inspections.</li> <li>None.</li> </ol>		
	(220,000)	U	Z. NOITE.		
North Dakota					
Lake Ashtabula - Baldhill Dam	1,403,000	1,354,000			
- · · · · · · · · · · · · · · · · · · ·	(1,262,000)	(1,257,000)	1. None.		
	(141,000)	(97,000)	2. None.		
	,	,			

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

			Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Homme Lake	165,000	281,000	
Hommo Lako	(165,000)	(175,000)	1. None.
	(0)	(106,000)	2. None.
Souris River	437,000	370,000	
	(331,000)	(320,000)	1. None.
	(106,000)	(50,000)	2. None.
Wisconsin			
Eau Galle River Lake	714,000	820,000	
	(649,000)	(820,000)	Variation in operations cost.
	(65,000)	(0)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items		
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003		
	Total	Total	(10%+/).		
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003		
-	(Maintenance)	(Maintenance)	(Threshold \$500,000)		
TOTAL - Reservoirs	31,707,000	31,838,000			
	(20,485,000)	(21,489,000)			
	(11,222,000)	(10,349,000)			

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

#### 2. Flood Control (Cont'd)

b. Channel Improvements, Inspections and Miscellaneous Maintenance

The budget estimate of \$1,931,000 provides for inspection of completed works during the budget year. All work is programmed.

	ESTIMATED O	BLIGATIONS	Reason for Change and Major Maintenance Items		
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003		
	Total	Total	(10%+/).		
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003		
	(Maintenance)	(Maintenance)	(Threshold \$500,000)		
<u>Louisiana</u>					
Bayou Pierre	27,000	40,000			
·	(0)	(0)	1. None.		
	(27,000)	(40,000)	2. None.		
Inspection of Completed	1,991,000	1,891,000			
Arkansas	(179,000)	(148,000)	Variation in inspections.		
Illinois	(513,000)	(508,000)			
lowa	(91,000)	(92,000)			
Kentucky	(5,000)	(14,000)			
Louisiana	(666,000)	(541,000)			
Minnesota	(96,000)	(99,000)			
Missouri	(178,000)	(154,000)			
Mississippi	(122,000)	(125,000)			
North Dakota	(65,000)	(68,000)			
Tennessee	(58,000)	(122,000)			
Wisconsin	(18,000)	(20,000)			

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

	<u>ESTIMATED</u> C	DBLIGATIONS	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
TOTAL - Channel Improvements Inspection and Misc Maintenance	2,018,000 (1,991,000) (27,000)	1,931,000 (1,891,000) (40,000)	
TOTAL - Flood Control	33,725,000 (22,476,000) (11,249,000)	33,769,000 (23,380,000) (10,761,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

#### 3. Multiple Purpose Power Projects

The program request of \$24,463,000 for the operation and maintenance of four multiple purpose projects provides the amount necessary for operation requirements. Annual requirements are for the necessary operation and ordinary maintenance of project facilities, labor, supplies, materials and parts required for day-to-day functioning of the project; and contract law enforcement. The requested amount also includes application of Special Recreation Use Fees for recreation areas.

	ESTIMATED (	<u>DBLIGATIONS</u>	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
<u>Arkansas</u>			
Blakely Mt. Dam	4,739,000	9,444,000	
Lake Ouachita	(4,020,000)	(5,380,000)	1. Variation in operations cost.
Earlo Gadorna	(719,000)	(4,064,000)	Variation in Hydropower maintenance.
	(1.10,000)	(1,001,000)	Zi. Vallation III Tyaropowor maintenance.
Degray Lake	4,211,000	4,620,000	
3 7	(3,361,000)	(3,758,000)	1. Variation in operation cost.
	(850,000)	(862,000)	2. None.
	,	, ,	
Narrow Dam - Lake Greeson	6,919,000	7,440,000	
	(3,239,000)	(3,922,000)	Variation in operation cost.
	(3,680,000)	(3,518,000)	<ol><li>Includes Rewind Generator number two.</li></ol>
<u>Missouri</u>			
Clarence Cannon	5,949,000	5,959,000	
and Reservoir	(3,474,000)	(3,642,000)	1. None.
	(2,475,000)	(2,317,000)	2. None.
	•	,	
TOTAL - Multiple Purpose	21,818,000	27,463,000	
	(14,094,000)	(16,702,000)	
	(7,724,000)	(10,761,000)	

4 February 2002

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

#### 4. Protection of Navigation

The aquatic program request shown provides for accomplishing the work necessary for the eradication of aquatic plant and project condition surveys.

	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Aquatic Growth	2,000,000	2,000,000	
Louisiana	(0)	(0)	1. None.
	(2,000,000)	(2,000,000)	2. None.
Little Falls, MN	121,000	0	
	(0)	(0)	1. None.
	(121,000)	(0)	2. None.
Project Condition	135,000	134,000	
Surveys			
Arkansas	(8,000)	(10,000)	
Illinois	(0)	(0)	
Kentucky	(0)	(0)	
Louisiana	(80,000)	(80,000)	
Minnesota	(16,000)	(7,000)	
Mississippi	(0)	(0)	
Missouri	(0)	(0)	
Tennessee	(13,000)	(19,000)	
Wisconsin	(8,000)	(8,000)	
Surveillance of Northern			
Boundary Waters	66,000	68,000	
Minnesota	(66,000)	(68,000)	1. None.
	(0)	(0)	2. None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

## 4. Protection of Navigation (Cont'd)

	<u>ESTIMATED</u> (	OBLIGATIONS .	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
TOTAL - Protection of	2,321,000	2,227,000	
Navigation	(200,000)	(227,000)	
-	(2,121,000)	(2,000,000)	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2003

## 4. Protection of Navigation (Cont'd)

	ESTIMATED C	BLIGATIONS	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
GRAND TOTAL -	361,005,000	354,675,000	
MISSISSIPPI	(126,194,000)	146,679,000	
VALLEY DIVISION	(234,811,000)	207,996,000	

APPROPRIATION TITLE: Operation and Maintenance, General - Major Rehabilitation - Locks and Dams (Navigation)

PROJECT: Mississippi River between Missouri River and Minneapolis, Minnesota, Locks and Dams Nos. 3, 5A, 6, 7, 8, and 9, Minnesota, Wisconsin and Iowa (Major Rehab)(Continuing)

LOCATION: Locks and Dams 3 and 5A-9 are located on the Mississippi River between river miles 797 and 648 approximately between Red Wing, Minnesota and Prairie du Chien, Wisconsin. Counties located along the river in this area are Dakota, Washington, Wabasha, Winona and Houston in Minnesota; Trempealeau, Buffalo, Pierce, La Crosse, Vernon, Crawford and Grant in Wisconsin and Allamakee and Clayton in Iowa.

DESCRIPTION: The original structures were placed in operation between 1936 and 1938. Each lock and dam consists of a lock (standard dimensions of 600 ft. long by 110 ft. wide), an uncompleted auxiliary lock, a dam consisting of movable gates to control river elevation, an earth embankment and an ungated overflow spillway. Work items under the major rehabilitation program are the replacement and/or refurbishing of the mechanical and electrical systems. This includes the machinery and control systems that operate the lock gates, the valves that control the level of water in the lock, and the movable gates of the dam. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1930.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is not applicable because monetary benefits have not been quantified.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio is not applicable because monetary benefits have not been quantified.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio is not applicable because monetary benefits have not been quantified.

BASIS OF BENEFIT-COST RATIO: The basis for the benefit-cost ratio is not applicable because monetary benefits have not been quantified.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$59,800,000		Entire Project	86	Sep 2004
Estimated Non-Federal Cost	0				
Total Estimated Project Cost	\$59,800,000				
•				PHYSICAL DATA	
Allocations to 30 September 2001	51,340,000				
Conference Amount for FY 2002	1,917,000		DAMS:		
Allocation for FY 2002	1,917,000		Replace electrical	systems	6 each
Allocations through FY 2002	53,257,000	89	Replace/refurbish LOCKS:	gate chains	29 each
Allocation Requested for FY 2003	2,248,000	93	Replace miter gat	e machinery	24 each
Programmed Balance to Complete after FY 2003	4,295,000		Replace tainter va		24 each
Unprogrammed Balance to Complete after FY 2003	0		Replace electrical		6 each
onprogrammed balance to complete after FT 2005	U		Replace electrical	Systems	U Cacii

JUSTIFICATION: The mechanical and electrical systems of the locks and dams have reached or exceeded their useful life of 50 years. Many of the mechanical components are custom made and a malfunction of any of the parts could shut down a lock for extended periods of time while replacement parts are being manufactured. A major failure of the mechanical system could close operation of the lock for 2 to 3 months. Frequent minor breakdowns which will close the lock for 2 to 3 days at a time are anticipated. Annual navigation benefits total \$9,373,086.

FISCAL YEAR 2003: The requested amount of \$2,248,000 will be applied as follows:

Continue:

Lock System Work\$ 1,891,000Planning, Engineering and Design185,000Supervision and Administration172,000

Total \$ 2,248,000

NON-FEDERAL COST: Not applicable.

STATUS OF LOCAL COOPERATION: Not applicable.

Mississippi Valley Division
St. Paul District
Mississippi River between Missouri River and
Minneapolis, MN, Locks and Dams Nos. 3, 5A, 6

7, 8, and 9, MN, WI and IA (Major Rehabilitation)

258

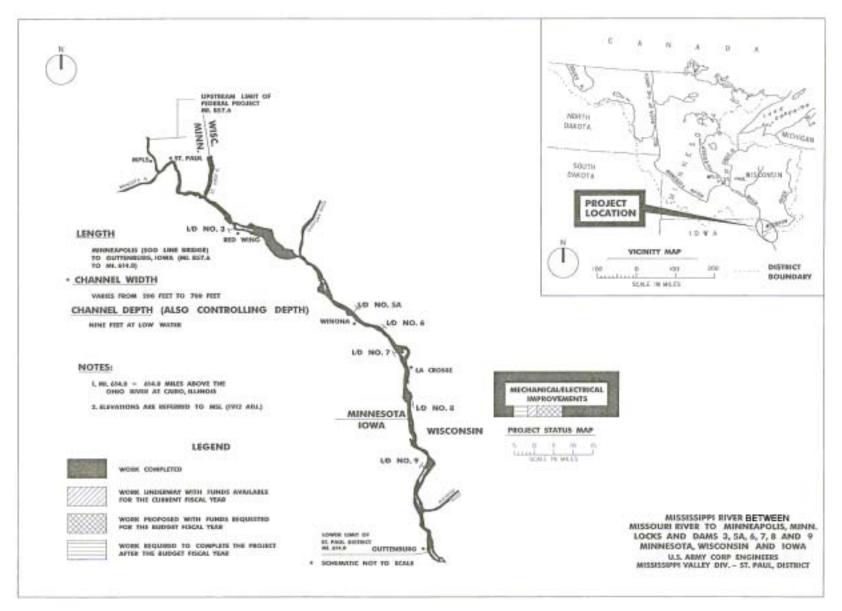
4 February 2002

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$59,800,000 is a decrease of \$3,300,000 from the latest estimate (\$63,100,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments (Including Contingency Adjustments)	\$ 259,000 -3,559,000
Total	\$ -3,300,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment was prepared in June 1987. The Finding of No Significant Impact was signed in August 1987. The Final Programmatic Environmental Impact Statement Record of Decision was signed 28 July 1989.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1986. The project has features that must be funded concurrently with Mississippi River Operation and Maintenance, General funds.



Mississippi Valley Division

St. Paul District

#### Justification of Estimates for Civil Works Activities Department of the Army, Corps of Engineers Fiscal Year 2003

#### SUMMARY MISSISSIPPI RIVER COMMISSION

Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MO, MS, & TN

	FY 2002 <u>Allocation</u>	FY 2003 <u>Request</u>	Increase <u>or Decrease</u>
General Investigations	\$ 10,864,000	\$ 6,008,000	\$ -4,856,000
Survey Preconstruction Engineering and Design	3,609,000 7,255,000	3,005,000 3,003,000	-604,000 -4,252,000
Construction	194,666,000	125,942,000	-68,724,000
Operation and Maintenance	164,462,000	162,135,000	- 2,327,000
Project Operation Project Maintenance	(57,412,000) (107,050,000)	(65,159,000) (96,976,000)	(7,747,000) (-10,074,000)
Less Reduction for Savings and Slippage	-24,000,000	-13,085,000	10,915,000
GRAND TOTAL, MISSISSIPPI RIVER COMMISSION	\$345,992,000	\$281,000,000	\$-64,992,000

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
1. SURVEYS - NEW					
a. Navigation Studies: None.					
b. Flood Damage Prevention Studies: None.					
c. Shoreline Protection Studies: None.					
d. Special Studies: None.					
e. Comprehensive Studies: None.					
f. Watershed/Ecosystem Studies: None.					
TOTAL SURVEYS - NEW	0	0	0	0	0

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2002	FY 2002	FY 2003	After FY 2003
•	\$	\$	\$	\$	\$

#### 2. SURVEYS - CONTINUING

- a. Navigation Studies: None.
- b. Flood Damage Prevention Studies: The amount of \$1,695,000 is being requested to continue two feasibility studies and complete two feasibility studies in FY 2003.

#### LOUISIANA

Alexandria, LA, to the Gulf 3,150,000 100,000 468,000 420,000 2,162,000 of Mexico, LA

New Orleans District

The study area is located in south-central Louisiana and encompasses an area of about 1,700 square miles extending through nine parishes from Alexandria, Louisiana, to the Gulf of Mexico. The area is the drainage basin for the West Atchafalaya Basin Floodway Levee intercepted drainage system, a feature of the Mississippi River and Tributaries project, that prevents overflow from the Atchafalaya Basin Floodway and intercepts flows from the areas major outlets. The largest urban area in the study area is Alexandria, which has experienced numerous floods in its metropolitan area. New Iberia and Opelousas are also in the study area. There have been extensive flooding problems in the Alexandria area and widespread flooding throughout the basin in the more rural and agricultural areas. Since 1953 there have been fifteen significant storm events with rainfall ranging from 5.4 to 18 inches in the study area. The lower portion of the study area is in the coastal zone and is comprised of wetlands subject to hurricane flooding and related problems including erosion, subsidence, saltwater intrusion, etc. The area is very rich in fish and wildlife resources. The local sponsor is the Louisiana Department of Transportation and Development and the Rapides Parish Gravity Drainage District No. 1. The sponsors have requested that flooding problems in the Alexandria, Louisiana area be addressed in the first phase of the feasibility study. A feasibility cost sharing agreement is scheduled to be signed in March 2002.

Fiscal Year 2002 funds will be used to continue into the feasibility phase of the study. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$6,100,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,200,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	3,050,000
Feasibility Phase (Non-Federal)	3,050,000

The reconnaissance phase is scheduled for completion in March 2002. The feasibility study is scheduled for completion in September 2007.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Donaldsonville, LA to the Gulf of Mexico New Orleans District	4,039,000	539,000	729,000	780,000	1,991,000

The study area is located in southeast Louisiana and includes portions of the Parishes of Assumption, St. James, St. John the Baptist, Lafourche, St. Charles, Jefferson, and Plaquemines. The area is bounded on the west by Bayou Lafourche and on the east and north by the west bank Mississippi River levee, from Donaldsonville, LA to the Gulf of Mexico. The basin is subject to rainfall, tidal, and hurricane flooding resulting in structural, agricultural, and environmental damages. Flooding damages are aggravated by the long duration of high stages due to conveyance obstructions. The prolonged stages destroy crops and stress the natural vegetation. Floods in June 1959, April 1980, November 1989, January 1991, and April/May 1991 produced near 100-year flood conditions with less than 100-year rainfall. Hurricane Juan in 1985 also produced near 100-year flood stages. This area has been declared a Federal disaster area three times since 1985 and has experienced several additional storms, causing FEMA to provide additional individual assistance. Red Cross surveys of the area after the April/May 1991 flood event indicated that some 300 residential structures were flooded to varying degrees. Flood damages also occurred in August 1992 as a result of Hurricane Andrew and in May 1995 due to heavy rainfall in the area. The expected study outcome will be to reduce flooding and flood duration by channel modifications, pumping, and water management such that structural and agricultural damages will be prevented and provide environmental restoration to stressed habitat. The local sponsors are the Louisiana Department of Transportation and Development and the Lafourche Basin Levee District. A feasibility cost sharing agreement is scheduled to be signed in February 2002.

Fiscal Year 2002 funds will be used to continue into the feasibility phase of the study. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$7,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$7,539,000
Reconnaissance Phase (Federal)	539,000
Feasibility Phase (Federal)	3,500,000
Feasibility Phase (Non-Federal)	3,500,000

The reconnaissance phase is scheduled for completion in February 2002. The feasibility study is scheduled for completion in September 2006.

	Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
TENNESSEE						
Germantown, TN Memphis District		613,000	65,000	203,000	345,000	0

The study area is located in Shelby County, Tennessee, adjoining the City of Memphis. Three separate drainage basins are included in the study area. The Miller Farms Drainage Basin is located in northeast Germantown and is drained by two major channels, Laterals B and BA, which combine into one channel as a tributary to the Wolf River. This basin is experiencing rapid urbanization with associated increases in water elevations, property flooding, and erosion. During a 1996 storm event, approximately ten homes and several streets were flooded along Laterals B and BA. The lateral D Drainage Basin, a tributary to Wolf River, is also located in northeast Germantown. Headcutting associated with the main Wolf River channel is progressing up Lateral D and threatening major utilities and public facilities. Erosion is undermining drainage pipes and damaging residential properties along the stream. The Howard Road Outfall Drainage Basin is located in southwest Germantown and is a tributary to Nonconnah Creek. Inadequate capacity of the outfall channel and tributaries, undersized and obstructed culverts, increased property flooding, and decreased water quality are the primary problems in this basin. Reconnaissance phase studies have been accomplished as part of the Memphis Metropolitan Area reconnaissance study. The principal purpose of the feasibility study is to identify an achievable solution to the flooding, erosion, and water quality problems plaguing this area. The City of Germantown, Tennessee, submitted a letter of intent on 9 March 2000 indicating a willingness to cost share in a feasibility study. The feasibility cost sharing agreement was signed 29 October 2001. Section 456 of the Water Resources Development Act of 2000 directed the Secretary to include environmental and water quality benefits in the justification analysis for the project and to not reject the project under the feasibility study based solely on a minimum amount of stream runoff. In addition, the sponsor is to receive credit for the value of in-k

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study. Fiscal Year 2003 funds will be used to complete the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$1,226,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,226,000	
Reconnaissance Phase (Federal)	0	1
Feasibility Phase (Federal)	613,000	
Feasibility Phase (Non-Federal)	613,000	

The reconnaissance phase was completed in October 2001. The feasibility study is scheduled for completion in August 2003.

4 February 2002 265

<sup>&</sup>lt;sup>1</sup> Funded as part of the Memphis Metropolitan Area, TN & MS, study.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Millington and Vicinity, TN Memphis District	275,000	0	125,000	150,000	0

The study area is located in Shelby County, Tennessee in the vicinity of Millington, Tennessee just north of Memphis. One of the primary drainage channels is Big Creek, which is a major tributary to the Loosahatchie River. The Big Creek drainage basin encompasses approximately 154 square miles. The City of Millington and vicinity is experiencing increased water surface elevations and erosion along Big Creek and its tributaries due to urban development and runoff in the area. This situation is expected to worsen in the near future. The deterioration of the area's ecosystem and the lack of recreational opportunities are also of concern. Reconnaissance phase studies have been accomplished as part of the Memphis Metropolitan Area reconnaissance study. The feasibility study will address potential solutions to flooding and erosion problems and investigate opportunities for ecosystem restoration and development of recreation features. The City of Millington submitted a letter of intent on 27 September 2001 indicating a willingness to cost share a feasibility study. A feasibility cost sharing agreement is scheduled to be signed in April 2002.

Fiscal Year 2002 funds will be used to continue into the feasibility phase of the study. Fiscal Year 2003 funds will be used to complete the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$550,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study costs sharing is as follows:

Total Estimated Study Cost	\$550,000
Reconnaissance Phase (Federal)	0 1
Feasibility Phase (Federal)	275,000
Feasibility Phase (Non-Federal)	275,000

The reconnaissance phase is scheduled for completion in April 2002. The feasibility study is scheduled for completion in September 2003.

Total Flood Damage Prevention Studies 8,077,000 704,000 1,525,000 1,695,000 4,153,000

4 February 2002 266

<sup>&</sup>lt;sup>1</sup> Funded as part of the Memphis Metropolitan Area, TN & MS, study.

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2002	FY 2002	FY 2003	After FY 2003
•	\$	\$	\$	\$	\$

- c. Shoreline Protection Studies: None.
- d. Special Studies: None.
- e. Comprehensive Studies: None.
- f. Watershed/Ecosystem Studies: The amount of \$710,000 is requested to continue two feasibility studies.

#### LOUISIANA

 Spring Bayou, Louisiana
 2,850,000
 350,000
 468,000
 530,000
 1,502,000

 Vicksburg District
 350,000
 350,000
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The Spring Bayou area is located in east-central Louisiana about 20 miles west of the confluence of the Mississippi, Red, and Atchafalaya Rivers. The area encompasses at least 43 lakes and streams and includes two state wildlife management areas and two national wildlife refuges. Historically, the study area was a remote wilderness, a backwater bottom-land hardwoods wetlands complete with access limited to boats during the flood season. Based on descriptions by local residents, the area is a "sportsman's paradise." This ecosystem is being rapidly degraded from pollution of water, sedimentation, and rampant growth of aquatic plants. This has led to decreased fisheries production due to loss of spawning habitat, water quality degradation, and a general loss of wetland values. Primary alternatives under investigation include freshwater diversion from the Red River in conjunction with sediment removal from existing streams and various water control structures. Preliminary findings indicate that the improvements would provide positive environmental benefits greater than project costs. Improvements would also help to reduce headwater flooding and provide positive stimulus to the area's ecosystem terrain. Representatives of the U.S. Fish and Wildlife Service and the Louisiana Department of Wildlife and Fisheries have expressed concern regarding the deteriorating conditions on the refuges and management areas and have expressed support for further investigation. The proposed non-Federal sponsors are the Avoyelles Wildlife Federation and Avoyelles Parish Policy Group. A feasibility cost sharing agreement is scheduled to be signed in August 2002.

If the reconnaissance report is certified to be in accord with policy, Fiscal Year 2002 funds will be used to continue into the feasibility phase of the study. The funds requested for Fiscal Year 2003 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$5,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,350,000
Reconnaissance Phase (Federal)	350,000
Feasibility Phase (Federal)	2,500,000
Feasibility Phase (Non-Federal)	2,500,000

The reconnaissance phase is scheduled for completion in August 2002. The feasibility study is scheduled for completion in September 2006.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
MISSISSIPPI					
Coldwater River Basin Below Arkabutla Lake, MS Vicksburg District	1,350,000	95,000	187,000	180,000	888,000

The study area is located in northwest Mississippi approximately 30 miles south of Memphis, TN. Increased development has created adverse impacts on area streams in meeting water quality standards while maintaining flood damage reduction goals. The Yazoo Mississippi Delta Joint Water Management District in conjunction with Tunica County, MS, has requested assistance in identifying measures to improve water management, water quality, flood control, and the wetland ecosystem throughout this watershed. The potential sponsors desire specific projects and guidelines for future development that will improve flood protection and the aquatic environment and conserve water resources. Projects will also be designed to prevent increases in downstream stages outside the study area. The potential sponsor is the Yazoo Mississippi Delta Joint Water Management District (YMD), which has expressed interest in this project since the spring of 2000 and will provide a letter of intent prior to execution of the feasibility cost sharing agreement scheduled to be signed in June 2002.

If the reconnaissance report is certified to be in accord with policy, Fiscal Year 2002 funds will be used to continue into the feasibility phase of the study. Fiscal Year 2003 funds will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase if \$2,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,250,000
Feasibility Phase (Non-Federal)	1,250,000

The reconnaissance phase is scheduled for completion in June 2002. The feasibility study is scheduled for completion in September 2006.

Total Watershed/Ecosystem Studies	4,200,000	445,000	655,000	710,000	2,390,000
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Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
g. Collection and Study of Basic Data	N/A	N/A	575,000	600,000	N/A

Surveys, Gages, and Observations. The funds requested for Fiscal Year 2003 are for collection of essential basic data which are subsequently used in the planning and design of flood control projects. The data collected under this activity are for authorized projects or units thereof for which funds have not been appropriated. The data to be collected will consist of information on stream flow, rainfall, floods, and other items of related hydrologic nature.

TOTAL - SURVEYS - NEW	0	0	0	0	0
TOTAL - SURVEYS - CONTINUING	12,277,000	1,149,000	2,180,000	2,405,000	6,543,000
TOTAL - SURVEYS	12,277,000	1,149,000	2,755,000	3,005,000	6,543,000

- 3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) NEW START None.
- 4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) CONTINUING:
  - a. Navigation: None.
  - b. Flood Control: The amount of \$3,003,000 is being requested to continue one and complete one PED project.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
LOUISIANA					
Morganza, LA, to the Gulf of Mexico New Orleans District	52,000,000	2,309,000	5,209,000	2,880,000	41,602,000

The study area is located in south Louisiana and includes portions of Terrebonne and Lafourche Parishes. The study area is subject to primarily backwater and tidal flooding. Extensive flooding occurred in the study area in 1973. Less extensive, but still widespread flooding, has occurred since that time, notably in 1989, May 1991, and 1992. In the May 1991 event, damages in Lafourche and Terrebonne Parishes were estimated at \$12,000,000. Between 1950 and 1990, the population increased from 61,000 to 97,000 or about 59 percent. Increases in population and other land use changes such as land clearing, subsidence and land loss have contributed to the increased stages. Also, there is a high probability that improvements to the existing flood control system have not kept pace with population growth and land use changes that would increase runoff. The expected outcome of the study would be to recommend hurricane protection for Terrebonne and Lafourche Parishes. The Water Resources Development Act of 1996 directed the Corps to perform a separate analysis of a lock in the Houma Navigation Canal for hurricane protection, saltwater intrusion, environmental preservation, safe harbor refuge, and potable water supply protection. This separate study was submitted to Congress in April 1997. The report recommended accomplishing Preconstruction Engineering and Design (PED) concurrent with the ongoing feasibility study so that implementation would be advanced should a favorable report be authorized. The preliminary benefit-cost ratio is 1.3 to 1 based upon the latest economic analysis dated August 2000. PED for the Houma Navigation Lock was authorized by Congress in FY 1997. The Louisiana Department of Transportation and Development is the feasibility cost sharing sponsor and will continue as the project sponsor. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED phase at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contr

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$2,700,000	Engineering and Design Costs	\$69,333,000
Initial Federal Share	2,025,000	Ultimate Federal Share	52,000,000
Initial Non-Federal Share	675,000	Ultimate Non-Federal Share	17,333,000

The project is not authorized for construction. Fiscal Year 2002 funds are being used to continue PED on the Houma Navigation Lock. The feasibility report for the remaining portion of the study will be completed in June 2002. Fiscal Year 2003 funds will be used to continue PED on the Houma Navigation Lock and initiate PED for other project features such as levees and floodwalls. The PED completion date is September 2013.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
TENNESSEE					
Wolf River, Memphis, TN Memphis District	410,000	95,000	192,000	123,000	0

The Wolf River study area is located in Hardeman, Fayette, and Shelby Counties, Tennessee, and Tippah, Marshall, and Benton Counties, Mississippi. The Wolf River flows northwestward approximately 86 miles to its confluence with the Mississippi River at Memphis, Tennessee, meandering through bottomland hardwood forests in its upper reaches and a man-altered channel in its lower reaches. The primary water resources problems in the basin are losses of nationally significant fish and wildlife habitat due in part to previous Corps projects. A feasibility study conducted in 1999 examined the Wolf River corridor with respect to flood control, ecosystem restoration, wetlands protection, recreation, and other needs. The lower basin has experienced a change in the hydraulic regime resulting from urbanization, especially in Shelby County, causing the dying of seasonally flooded bottomland hardwoods and other wetlands. Severe channel instability problems have resulted in the loss of riparian and fisheries habitat and threatened public infrastructure on the main channel and tributaries. The recommended plan of improvement identified in the feasibility study includes construction of six main channel weirs and eighteen tributary weirs for grade stabilization, two cutoff prevention weirs on the main channel, trails, wildlife corridors and boat ramps all in Shelby County, Tennessee. The estimated construction cost is \$9,905,000, with an estimated Federal cost of \$6,350,000 and non-Federal cost of \$3,555,000. Average annual benefits resulting from the plan include over 2,144 annual habitat unit values (AHUVs) and \$414,000 in recreational benefits. The Chickasaw Basin Authority, an agency of the State of Tennessee, was the cost-sharing sponsor for the feasibility study. The Chief's Report was signed on 29 December 2000. A PED cost sharing agreement was signed 5 July 2001 with the Chickasaw Basin Authority and Shelby County, Tennessee. PED will ultimately be cost shared at the rate for the project to be constructed but will be fin

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$547,000	Engineering and Design Costs	\$547,000
Initial Federal Share	410,000	Ultimate Federal Share	356,000
Initial Non-Federal Share	137,000	Ultimate Non-Federal Share	191,000

The project is authorized for construction by Section 101 of the WRDA of 2000. The cost-sharing for construction of the project will be 65 percent Federal and 35 percent non-Federal in accordance with WRDA of 1996. Fiscal Year 2002 funds are being used to continue preconstruction engineering and design. Fiscal Year 2003 funds will be used for completion of PED scheduled in December 2002.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Total - Flood Control	52,410,000	2,404,000	5,401,000	3,003,000	41,602,000
TOTAL - PED	52,410,000	2,404,000	5,401,000	3,003,000	41,602,000
GRAND TOTAL - Surveys & PED	65,862,000	3,553,000	8,156,000	6,008,000	48,145,000

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, & TN - Construction

PROJECT: Mississippi River and Tributaries, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee (Continuing)

LOCATION: The comprehensive project for Flood Control, Mississippi River and Tributaries will provide flood protection for the alluvial valley of the Mississippi River from Cape Girardeau, Missouri, to the Head of Passes, Louisiana; and for improvement of the Mississippi River for navigation from Cairo, Illinois, to Baton Rouge, Louisiana. It includes the main river, the basins of the St. Francis, White, Arkansas, Tensas, Red, Yazoo and Atchafalaya Rivers, the alluvial lands around Lake Pontchartrain, and the tributary streams in Western Tennessee and Kentucky. The completed project will provide protection against a project design flood, which will amount to a flow of 2,360,000 cubic feet per second at Cairo, Illinois, and 3,030,000 cubic feet per second at the latitude of Old River above Baton Rouge, Louisiana. This flow will divide near this point with 1,530,000 cubic feet per second going down the Atchafalaya River and the West Atchafalaya and Morganza Floodways. The remaining 1,500,000 cubic feet per second will continue down the Mississippi River to a point above New Orleans, where 250,000 cubic feet per second will be diverted through the Bonnet Carre' Spillway to Lake Pontchartrain. The flow past New Orleans to the Gulf of Mexico will then be 1,250,000 cubic feet per second, which is the river's safe capacity.

The control of this large quantity of water will be accomplished by every practical means of flood control, especially reservoirs, levees, cutoffs, revetments, and floodways.

The justification of the funds requested is presented on separate sheets for each major feature of the project. These major features are termed "project" for the purposes of reporting, accounting and fiscal control, and where appropriate, are further separated into their separable units.

AUTHORIZATION: Flood Control Act of 1928, as amended.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST
Total Estimated Federal Cost	\$13,950,676,000	
Allocations to 30 September 2001	7,385,501,000	
Allocations for FY 2002	188,843,000	54
Allocations through FY 2002	7,574,344,000	
Allocations Requested for FY 2003	128,945,000	55
Programmed Balance to Complete after FY 2003	5,301,136,000	
Unprogrammed Balance to Complete after FY 2003	946.251.000	

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$13,950,676,000 for the Mississippi River and Tributaries project is an increase of \$293,931,000 from the latest estimate (\$13,656,745,000) submitted to Congress (FY 2002). Detail of the changes for features included in the Fiscal Year 2003 budget request are shown under the individual features on the following pages of the Justification Data.

Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN - Construction

PROJECT: Mississippi River Levees, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The Mississippi River Levee system on the west bank extends from Allenville, Missouri, on the Little River Diversion Channel generally southward to the vicinity of Venice, Louisiana, and on the east bank from Hickman, Kentucky, to opposite Venice, Louisiana, except where interrupted by hills and tributary streams. Included in the system are the levees which protect Mounds, Mound City and Cairo, Illinois, and the New Madrid Levee and Floodway.

DESCRIPTION: The plan of improvement provides for raising, strengthening, and in some cases, extending existing levees to provide protection against the project flood. This feature includes 1,519.5 miles of levees and 14.8 miles of floodwall. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968, and PL 92-222.

REMAINING BENEFIT-REMAINING COST RATIO: 36.6 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

TOTAL BENEFIT-COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The last comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement	\$2,121,000,000		Entire Project	92	September 2031
Future Non-Federal Reimbursement	674,000				
Estimated Federal Cost (Ultimate)	2,120,326,000			PHYSICAL D	ATA
Estimated Non-Federal Cost Cash Contributions \$ 1,793,000 Other Costs 76,325,000 Reimbursement 674,000 Recreation Facilities \$674,000	\$ 78,792,000		Channel and Canals Levees: Average Height Length Floodwalls: Average Height		72 miles 20-35 feet 1,519.5 miles 14-23 feet
Total Estimated Project Cost	\$2,199,118,000		Length Levee Berms		14.8 miles 629.3 miles
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002	\$ 932,208,000 50,057,000 46,811,000 979,019,000	46	Levee Roads Pumping Stations		1,500.0 miles 5
Allocation Requested for FY 2003 Programmed Balance to Complete After FY 2003 Unprogrammed Balance to Complete After FY 2003	\$ 42,360,000 1,099,621,000 0	48			

<sup>&</sup>lt;sup>1</sup> Reflects \$3,246,000 reduction assigned as savings and slippage.

JUSTIFICATION: The Mississippi River Levee system is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River and a few miscellaneous items. Because the benefits of the Mississippi River Levees derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The Mississippi River Levee System provides protection to 23,620 square miles and partial protection to an additional 3,780 square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition to highly developed agricultural areas, the levees afford protection to urban areas and many industries.

The value of lands and improvements protected by authorized works against the design flood is \$139.4 billion in 2000 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by the project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$10.5 billion damages in 2000 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the Federal projects in place. Without the Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2000 prices, damages without the projects would have been \$38.2 billion and damages prevented would have been \$35.8 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	\$2,734,073,000
Navigation	884,704,000
Area Redevelopment	3,132,000
Recreation	3,434,000
Total	\$3,625,343,000

## FISCAL YEAR 2003: The requested amount will be applied as follows:

Initiate: Pecan Point, AR, Relief Wells Island 8, KY, Outlet Ditches Alhambra-Hohen Solms, LA, Mile 191-185R Hohen Solms-Modeste, LA, Mile 185-179R Gap Closure, East Bank, LA, Mile 230-44L Trotter, MS, Berm Carlisle-Tallula, MS, Item 488-L Caruthersville, MO, Outlet Ditches	\$ 200,000 605,000 800,000 800,000 1,565,000 1,477,000 200,000 200,000
Initiate and Complete: Above Cairo, IL, Seepage Control Hillhouse, MS, Relief Wells, Parcel 2	1,302,000 826,000
Continue:     Lands and Damages     Cultural Resources Preservation     Miscellaneous Relocations     Miscellaneous Hired Labor     Wilson Point-Point Lookout, LA, Item 485-R     Willow Point-Youngs Point, LA, Item 445-R     Willow Point-Youngs Point, LA, Item 450-R     Willow Point-Youngs Point, LA, Item 453-R     Willow Point-Youngs Point, LA, Item 457-R     Willow Point-Youngs Point, LA, Item 461-R     Tallula-Magna Vista, MS, Item 477-L	2,749,000 897,000 998,000 140,000 2,680,000 2,391,000 1,320,000 2,596,000 2,596,000 2,547,000 2,226,000
Complete: Island 8, KY, Relief Wells Wilson Point-Point Lookout, LA, Item 480-R Austin, MS, Relief Wells Valewood-Carlisle, MS, Item 496L	300,000 1,780,000 1,052,000 609,000
Planning, Engineering and Design Supervision and Administration	7,094,000 2,410,000
Total	\$ 42,360,000

NON-FEDERAL COST: In accordance with the Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968 and PL 92-222, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	\$76,003,000	
Minor maintenance of all flood control works after their completion, except controlling a regulating spillway structures, including special relief levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to mainline river levees.		\$1,103,000
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	2,467,000	141,900
Other (levee and revetment construction)	322,000	
Total Non-Federal Costs	\$78,792,000	\$1,244,900

STATUS OF LOCAL COOPERATION: It is estimated that local interests had spent approximately \$292,000,000 for flood protection prior to the Act of 15 May 1928. After passage of the Act, the 37 levee districts along the Mississippi River adopted resolutions assuring the United States that the requirements of local cooperation will be met. These local interests have acquired all rights-of-way for work completed and underway and will try to provide the rights-of-way for work scheduled for Fiscal Year 2003. Some levee boards are having difficulty in providing right-of-way when requested, even for construction work in areas where the existing levees are farthest below the authorized grade. Supplemental assurances covering the requirements of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646) have been accepted for Main Stem Mississippi River Levees in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee.

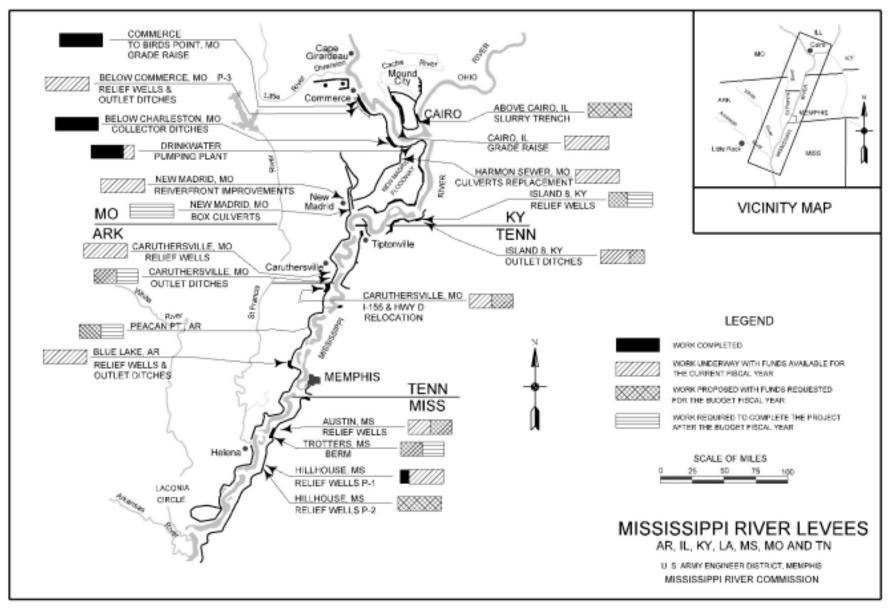
Assurances of local cooperation for the recreation facilities at Warfield Point, Mississippi, were accepted on 14 October 1969. Supplemental assurances covering the River and Harbor Act of 1970 (PL 91-611) and PL 91-646 were accepted 7 August 1972. Assurances have not as yet been requested for the recreation facilities at Mississippi River State Park, Arkansas.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$2,121,000,000 is an increase of \$15,000,000 from the latest estimate (\$2,106,000,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments Price Escalation on Real Estate	\$ 9,307,000 1,655,000 4,038,000
Total	\$15,000,000

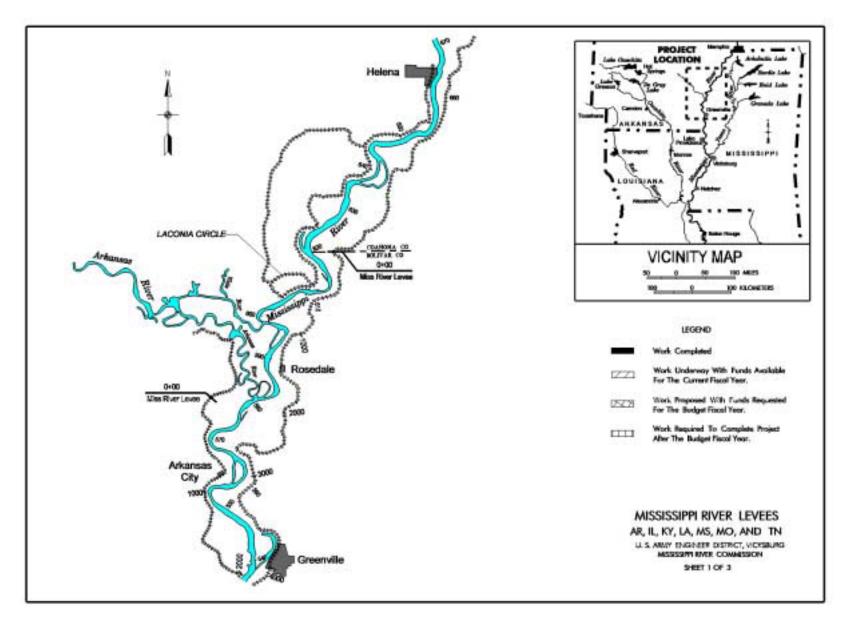
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976. A Supplemental Environmental Impact Statement for the project was completed and the Record of Decision was signed on 5 October 1998. The adequacy of the Supplemental Environmental Impact Statement was challenged but upheld by the United States District Court for the Eastern District of Louisiana. The Fifth Circuit Court of Appeals on October 23, 2000, affirmed the district court's grant of summary judgment to the Government.

OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.



Mississippi River Commission

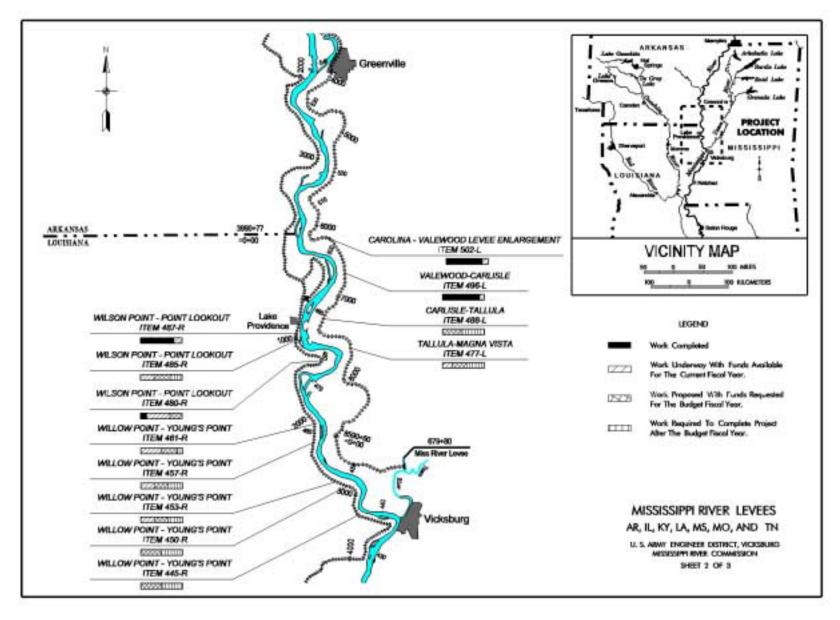
Memphis, Vicksburg, and New Orleans Districts Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN



Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts

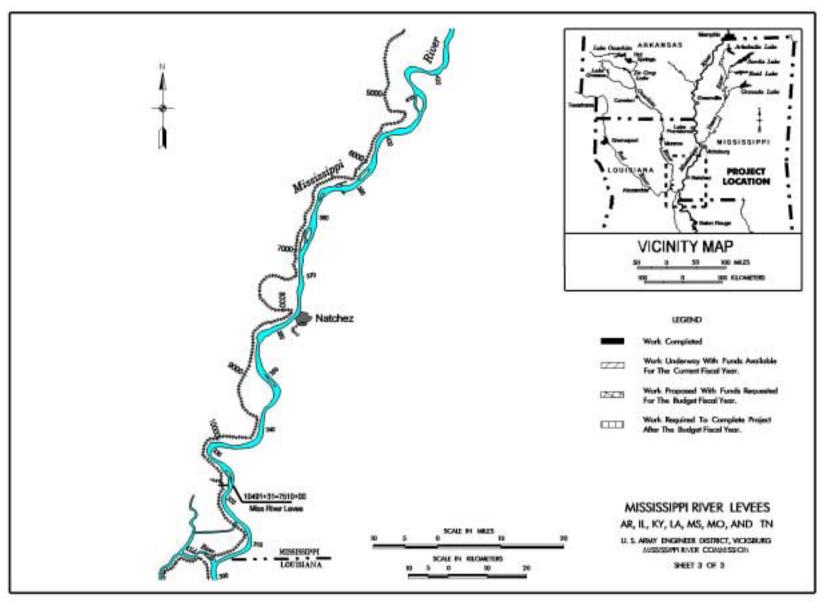
Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN



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Memphis, Vicksburg, and New Orleans Districts

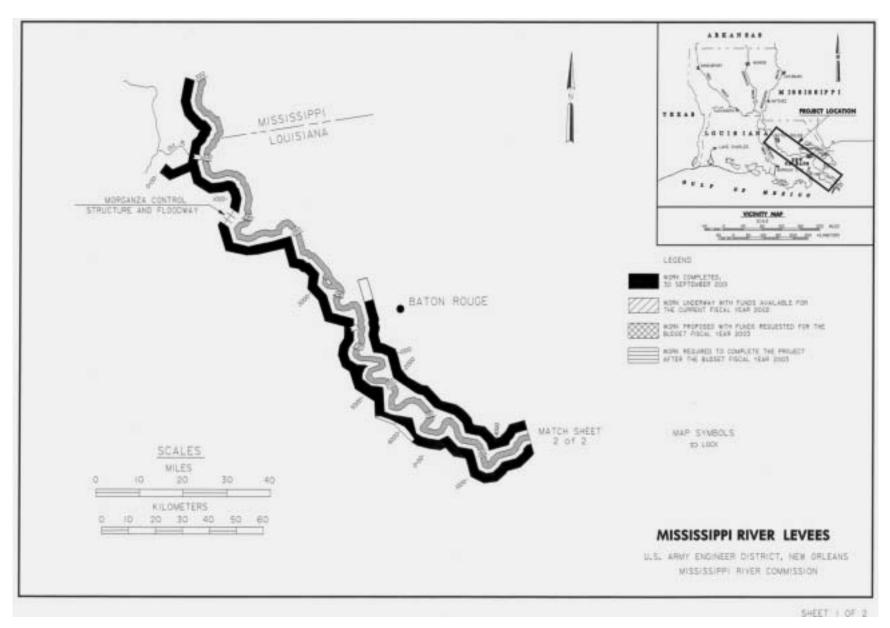
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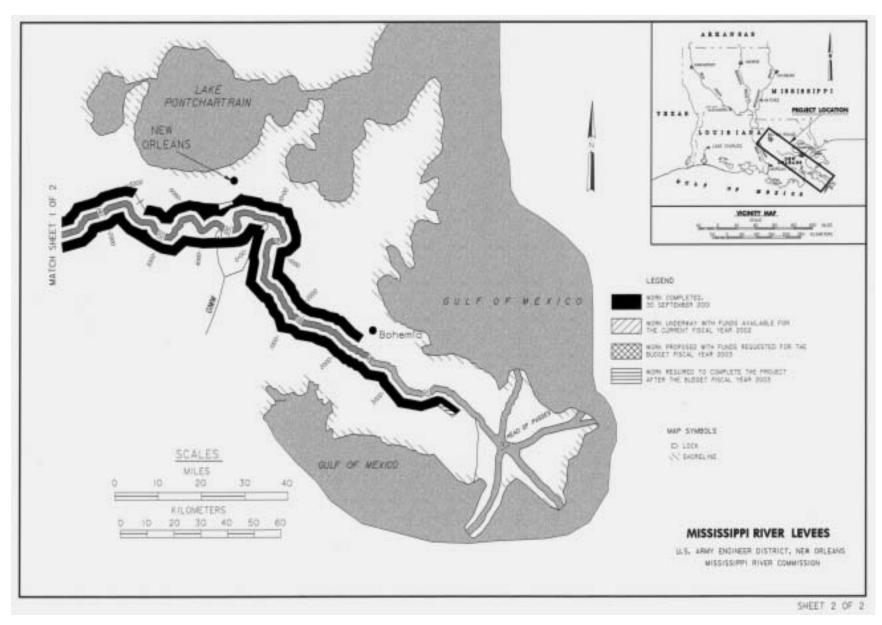
Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN



Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts

Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN



Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Channel Improvement, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The project is located in the Mississippi River and along its banks from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, a distance of approximately 966 miles.

DESCRIPTION: The plan of improvement consists of stabilizing the banks of the river in a desirable alignment and obtaining the most efficient flow characteristics for it for flood control and navigation by means of revetments, dikes, foreshore protection, and improvement dredging. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1962, 1965, 1966, and 1970.

REMAINING BENEFIT-REMAINING COST RATIO: 36.6 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

TOTAL BENEFIT-COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA	<b>\</b>		ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contributions Other Costs	\$1,800,000 100,000	\$3,964,000,000 \$ 1,900,000		Entire Project	93	September 2020
Total Estimated Project Cost		\$3,965,900,000			PHYSICAL D	DATA
Allocations to 30 September 2001 Conference Allowance for FY 200 Allocation for FY 2002 Allocations through FY 2002		\$2,610,389,000 45,000,000 42,081,000 2,652,470,000	67	Lands and Damages Revetments Dikes Dredging Foreshore Protection		19,135 acres 1,085 miles 339 miles As required 160 miles
Allocation Requested for FY 2003 Programmed Balance to Complete Unprogrammed Balance to Comp	e After FY 2003	\$ 36,690,000 1,274,840,000 0	68	Pumping Station		1

<sup>&</sup>lt;sup>1</sup> Reflects \$2,919,000 reduction assigned as savings and slippage.

JUSTIFICATION: The Channel Improvement Project is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of Channel Improvement derive from the way in which they operate together with the Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The Mississippi River, with a drainage area of about 1,245,000 square miles, has a wide range of flow, increasing from an approximate minimum of 90,000 cubic feet per second (675,000 gallons per second) to a maximum of 2,345,000 cubic feet per second (17,587,000 gallons per second) which occurred in 1927 at the latitude of Red River Landing. The project flood is 3,030,000 cubic feet per second (22,500,000 gallons per second). Part of the tremendous energy of this volume of flowing water is directed toward a relentless attack on the banks of the river, causing the unprotected banks to cave into the river. As this caving progresses, the attack becomes more direct, the bendway moves in toward the levee, and more sediment is placed in the river and deposited downstream in the form of a sandbar. This bar gradually builds out into the channel and deflects the river's attack to the opposite bank. As the cycle is repeated the river tends to meander and lengthen. Revetment is placed against the banks of the river at locations where mainline levees are being threatened with destruction or where unsatisfactory alignment and channel conditions are developing. Revetment serves a three-fold purpose in that the river is prevented from encroaching on the Main Stem levees, excess material is kept out of the stream, and a favorable channel alignment and depth are maintained. An objective of the plan is to preserve favorable alignments and efficient cross-sectional areas and to prevent the river from creating new meander patterns. In wide reaches of the river, dikes are used to contract the channel width so as to produce a single efficient channel for navigation and to insure the flood carrying capacity of the river. Chutes and secondary channels are controlled for the same purpose. Improvement dredging is employed to assist the river in removing natural obstructions which deflect the current into undesirable patterns of flow and to assist in developing an efficient channel. Foreshore protection is utilized to preserve the integr

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is \$139.4 billion in 2000 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$10.5 billion in damages in 2000 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2000 prices, damages without the projects would have been \$38.2 billion and damages prevented would have been \$35.8 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	\$ 2,734,073,000
Navigation	884,704,000
Area Redevelopment	3,132,000
Recreation	3,434,000
Total	\$ 3,625,343,000

### FISCAL YEAR 2003: The requested amount will be applied as follows:

Revetments Dikes	\$ 25,273,000 11,417,000
Total	\$ 36,690,000

Revetments: The planned program consists of items of work for which funds will be required as follows:

Lands and Damages	\$ 100,000
Construction of Revetments	16,663,000
Cultural Resources	50,000
Planning, Engineering, and Design	7,950,000
Supervision and Administration	510,000
Total	\$ 25,273,000

### The items of revetment work are:

## Approximate length in feet:

Hickman Bar, KY	2,000
Lake Concordia, MS	750
Klondike, AR	1,000
Fitler, MS	750
Racetrack Towhead, MS-LA	750
Ashland, MS-LA	500
Glasscock Cutoff, MS-LA	500
False Point, LA	750
Reinforcement	7,767

# Dikes: The planned dike work consists of the following items:

Ashport-Goldust, AR Drivers Bar, TN Friars Point, MS Kate Aubrey-Keyes Point, TN-AR Montgomery Towhead, AR Vaucluse Bendway Weirs, AR, Phase II Baleshed-Stack Island, MS-LA Waterproof, LA Lands and Damages Surveys and Layouts Cultural Resources Planning, Engineering, and Design Supervision and Administration	\$ 1,000,000 4,303,000 1,000,000 300,000 310,000 902,000 90,000 35,000 22,000 21,000 1,914,000 620,000
Total	\$ 11,417,000

NON-FEDERAL COST: In accordance with Section 4 of the Flood Control Act of 1944, as amended by Section 207 of the Flood Control Act of 1962, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area.	\$ 100,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities.	1,800,000	\$ 169,000
Total Non-Federal Costs	\$ 1,900,000	\$ 169,000

STATUS OF LOCAL COOPERATION: Assurances furnished by the Missouri Department of Conservation for the Dorena Recreation Facility were accepted 27 August 1971; assurances furnished by the Tennessee Department of Conservation for the Richardson Landing Recreation Facility were accepted 3 September 1976; and assurances furnished by the City of Memphis, Tennessee, for Volunteer Bicentennial Park were accepted 11 September 1975. Assurances furnished by the City of Osceola, Arkansas, for Lake Neark, Arkansas, are embodied in the contract for cost sharing approved on 19 September 1982. A Local Cooperation Agreement for the Ed Jones Boat Ramp with the State of Tennessee was signed 27 October 1988. A Local Cooperation Agreement for the Dyersburg, Tennessee, Boat Ramp with the State of Tennessee was signed 11 July 1994.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$3,964,000,000 is an increase of \$101,000,000 from the latest estimate (\$3,863,000,000) presented to Congress (FY 2002). This change includes the following items:

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item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments Price Escalation on Real Estate	\$ 45,999,000 54,190,000 811,000
Total	\$ 101 000 000

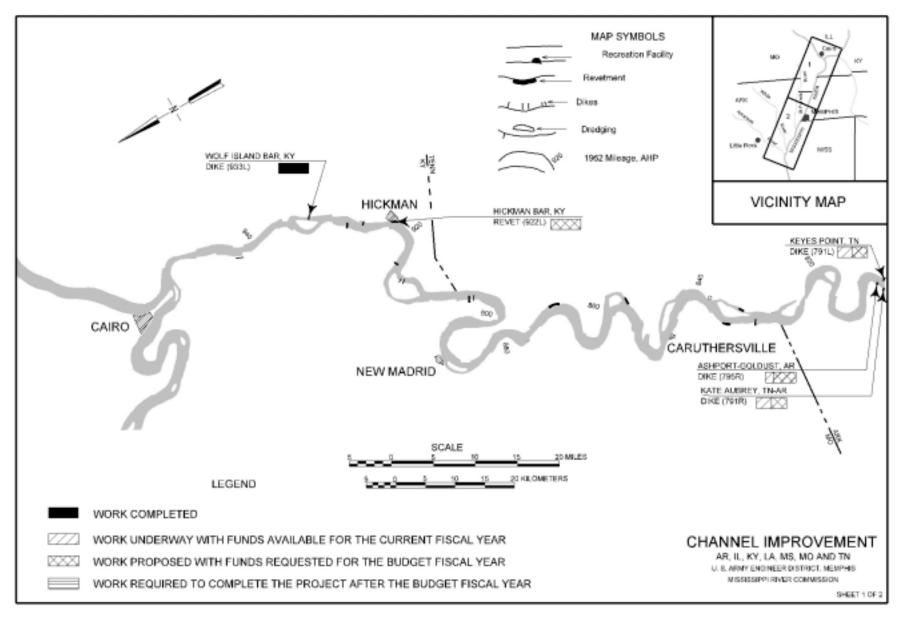
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976.

OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.

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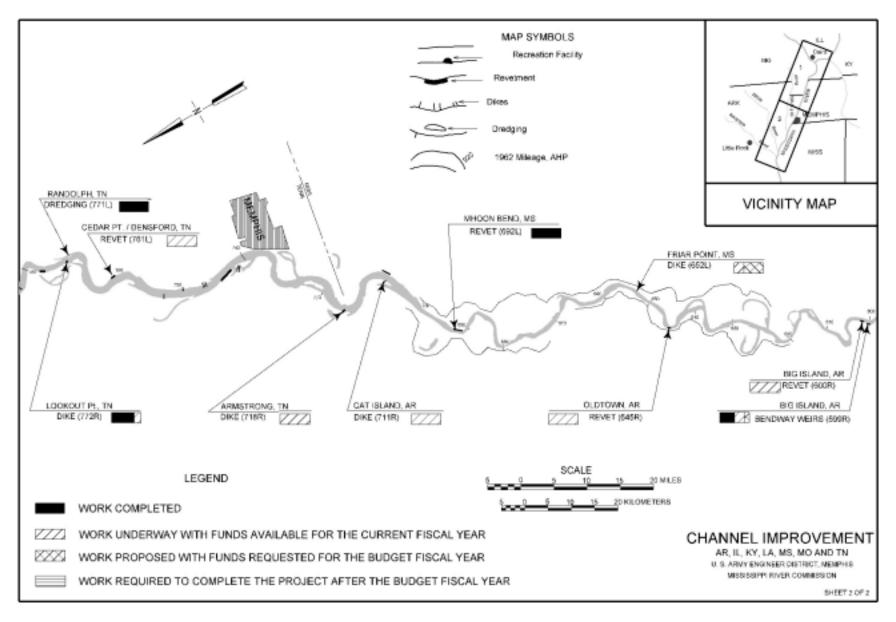
Mississippi River Commission

Memphis, Vicksburg, and
New Orleans Districts



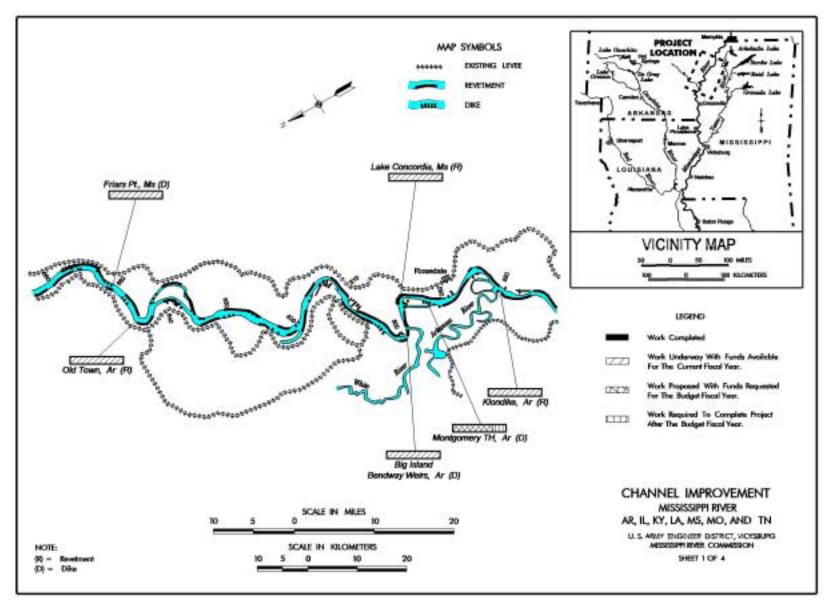
Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts



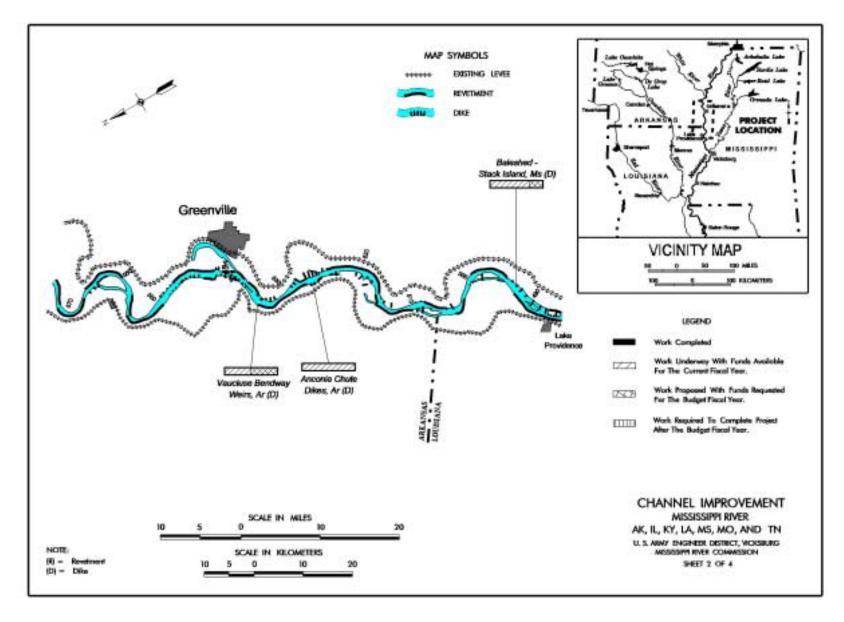
Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts



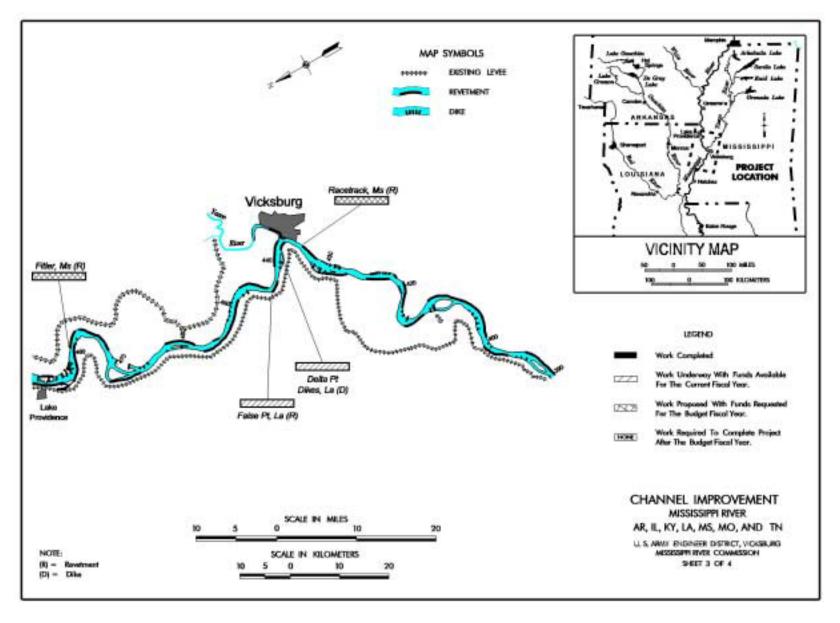
Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts



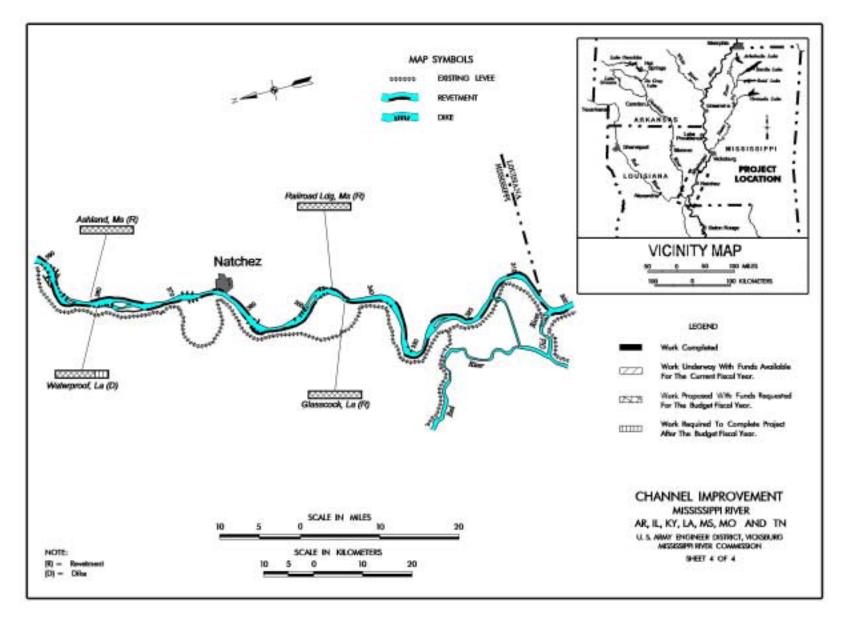
Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts



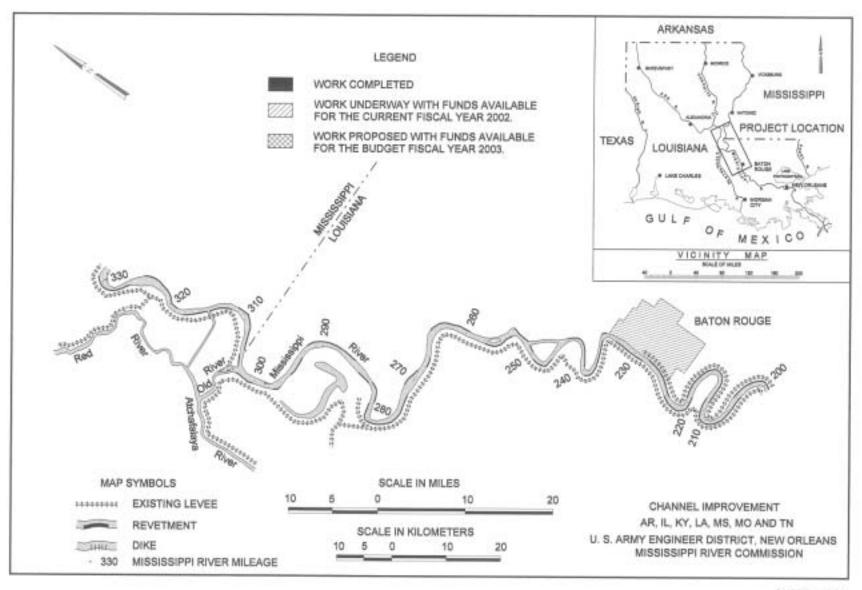
Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts

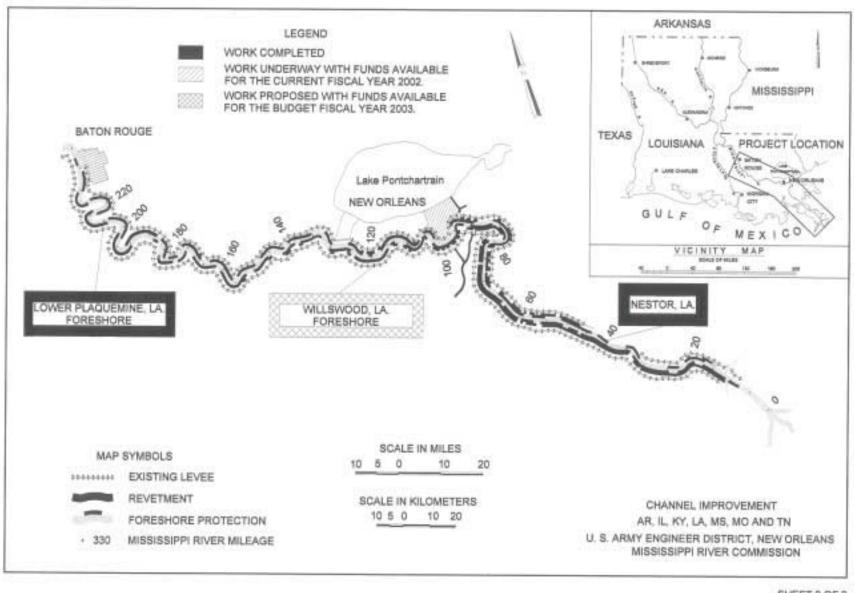


Mississippi River Commission

Memphis, Vicksburg, and New Orleans Districts



SHEET 1 OF 2



SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Atchafalaya Basin, Louisiana (Continuing)

LOCATION: The project is located in south-central Louisiana below the latitude of Old River and west of and generally paralleling the Mississippi River. The Atchafalaya River flows through the middle of the basin.

DESCRIPTION: The plan of improvement consists of a leveed floodway about 15 miles wide and 110 miles long that extends generally from the latitude of Old River to the Gulf of Mexico. The upper half of the basin is divided by the leveed Atchafalaya River. The Morganza Floodway is to the east of the Atchafalaya River and has a capacity of 600,000 cubic feet per second, which is introduced into the floodway by a gated control structure. The West Atchafalaya Floodway, which is located to the west of the river, is placed into operation when the fuse plug sections are overtopped bringing flows from the river that will introduce 900,000 cubic feet per second into the lower basin. After passing through the floodways, the flood waters enter the Gulf of Mexico through the Lower Atchafalaya River at Morgan City and the Wax Lake Outlet channel constructed west of Patterson, Louisiana. The project is part of a system and all work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1934, 1936, 1938, 1941, 1946, 1950, 1954.

REMAINING BENEFIT - REMAINING COST RATIO: 36.6 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem System of the Mississippi River and Tributaries project.

TOTAL BENEFIT - COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT - COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT - COST RATIO: Benefits are from latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS: (1 January 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$1,801,000,000		Est Delicat	00	0
Estimated Non-Federal Cost Cash Contributions Other Costs	\$2,500,000 8,500,000	11,000,000		Entire Project	93	September 2031
Total Estimated Project Cost		\$1,812,000,000				
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002		\$ 892,315,000 25,400,000 23,752,000 <sup>1</sup> 916,067,000	51			
Allocation Requested for FY 2003 Programmed Balance to Complete at Unprogrammed Balance to Complete		\$ 18,873,000 866,060,000 0	52			

4 February 2002

<sup>&</sup>lt;sup>1</sup> Reflects \$1,648,000 reduction assigned as savings and slippage.

#### PHYSICAL DATA

Levees:

Average Height - 20 feet Length - 449 miles

Relocations:

Roads - 15 miles Railroads - 20 miles Drainage Structures:

Pointe Coupee 2 gates, 10.5 by 15 feet

Melville 2 - 72-inch corrugated metal pipe

with vertical lift gate

Darbonne 10-foot by 10-foot barrel with

vertical lift gate

Bayou des Glaises 72-inch corrugated metal pipe with

flap gate

Bayou Courtableau 2 weirs, 503 feet long Brushy Bayou 5-foot by 6-foot barrel with

vertical lift gate

Bayou Courtableau 5-barrel, each 10 feet by 15 feet

with vertical lift gate

Wax Lake East 25 pipes, 5 feet in diameter with

slide gates

Wax Lake West 15 pipes, 5 feet in diameter with

slide gates

Lands and Damages: 289,212 acres

**Pumping Stations:** 

Number - 11

Capacity - Minimum - 50 cubic feet per second

Maximum - 1,500 cubic feet per second

Average - 400 cubic feet per second

Bank Stabilization:

Length - 58 miles

Floodgates:

Charenton - Sector-gated, 45 feet wide East Calumet - Sector-gated, 45 feet wide West Calumet - Sector-gated, 45 feet wide

Channels:

Length: 147.1 miles

Locks:

Bayou Boeuf, 75 feet by 1,156 feet, earth chamber Bayou Sorrel, 56 feet by 797 feet, earth chamber Berwick, 45 feet by 300 feet, concrete chamber

Atchafalaya River Navigation: New Channel-10.1 miles Freshwater Control Structure:

Sherburne - dual 10-foot by 10-foot reinforced

concrete box culverts with gates

Henderson - dual 10-foot by 10-foot reinforced

concrete box culverts with gates

JUSTIFICATION: The Mississippi River below Morganza Floodway is capable of carrying 1,500,000 cubic feet per second without threatening the integrity of the lesser populated levees along its banks which protect densely populated areas, highly developed agricultural lands, industries, and the city of New Orleans, as well as a number of communities. Studies indicate that the project flood against which the flood control protection works are designed will be of such magnitude that 3,030,000 cubic feet per second will pass the latitude of Old River. Since the Mississippi River below the Morganza Floodway can carry only one-half this amount, the other one-half must be diverted from the main channel. The diversion is made through the Old River Control Structure, the Old River Auxiliary Structure, and the Atchafalaya River, and through the Morganza and West Atchafalaya Floodways. In order to prevent diverted waters from spreading over the rich and highly developed agricultural lands outside of the Atchafalaya Basin, these rivers and floodways have been leveed to confine the diverted flow. In order to eliminate unnecessary damage, it is essential that the work proceed as vigorously and as expeditiously as possible.

This floodway system is, for all practical purposes, a part of the main river system, in as much as the integrity of the main river system depends upon its utilization. Since this construction began, farms and industries have developed in the areas adjacent to the floodway with full confidence that they would receive protection. Therefore, overtopping or crevassing of the levees would cause far more damage than anticipated at the start of project construction. The main protection levees in the lower reaches are deficient because of consolidation of the soft underlying soils, especially those below the latitude of Krotz Springs, LA. Early construction of these levees to the approved grade is essential, not only for flood protection, but as a means of access for the movement of manpower and equipment to any spot threatened by floods.

The Atchafalaya Basin project is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of the Atchafalaya Basin derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The value of lands and improvements protected by authorized works against the design flood is \$139.4 billion in 2000 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$10.5 billion damages in 2000 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amount to \$10.6 billion. Expressed in 2000 prices, damages without the projects would have been \$38.2 billion and damages prevented would have been \$35.8 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	\$ 2,734,073,000
Navigation	884,704,000
Area Redevelopment	3,132,000
Recreation	3,434,000
Total	\$ 3,625,343,000

## FISCAL YEAR 2003: The requested amount will be applied as follows:

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E69/E73 Levee Enlargement, 2 <sup>nd</sup> Lift W52 Levee Enlargement, 2 <sup>nd</sup> Lift	\$ 875,000 1,108,000
Initiate and Complete: East Grand Lake/Department of Energy/21" Pipeline Gaps	413,000
Continue: Todd Levee Enlargement and Pump Station Bank Stabilization	1,862,000 3,304,000
Complete: East Bayou Sale Gordy Levee Enlargement West Bayou Sale Maryland North Bend Levee Enlargement	2,555,000 1,477,000
Lands and Damages Surveys and Layouts Planning, Engineering and Design Supervision and Administration	387,000 100,000 5,317,000 1,475,000

Total

4 February 2002

\$18,873,000

NON-FEDERAL COST: In accordance with the Flood Control Act of 15 May 1928, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Bear the administrative costs for furnishing rights-of-way for levee and levee drainage construction; purchase maintenance equipment; and perform miscellaneous levee work.	\$ 1,110,000	0
Agree to accept lands turned over to them under the provision of Section 4 of the Flood Control Act of 15 May 1928, and as provided in the Flood Control Act of 18 August 1941.	0	0
Bear costs for and maintain all flood control works after their completion, except controlling and regulating spillway structures, including special levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to the levees.	0	\$3,700,000
For the Upper Point Coupee Loop Area, provide an interior drainage system and comply with the applicable provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, approved 2 January 1971, and comply with the provision of Section 221 of the Flood Control Act of 1970, PL 91-611.	7,390,000	0
The State of Louisiana, through the Department of Transportation and Development as the local sponsor, will provide a voluntary 25% cost share for the planning, design, and construction of the interim protection for floodproofing of riverfront businesses in Morgan City and Berwick.	2,500,000	0
Total Non-Federal Costs	\$11,000,000	\$3,700,000

Mississippi River Commission New Orleans District Atchafalaya Basin, Louisiana

STATUS OF LOCAL COOPERATION: Necessary assurances for maintaining the project have been furnished by the Atchafalaya Basin Levee District; Red River, Atchafalaya and Bayou Boeuf Levee District; St. Mary Parish Government; Pointe Coupee Parish Police Jury; and the towns of Berwick and Morgan City, LA. These agencies are furnishing all requirements of local cooperation necessary for meeting present project schedules.

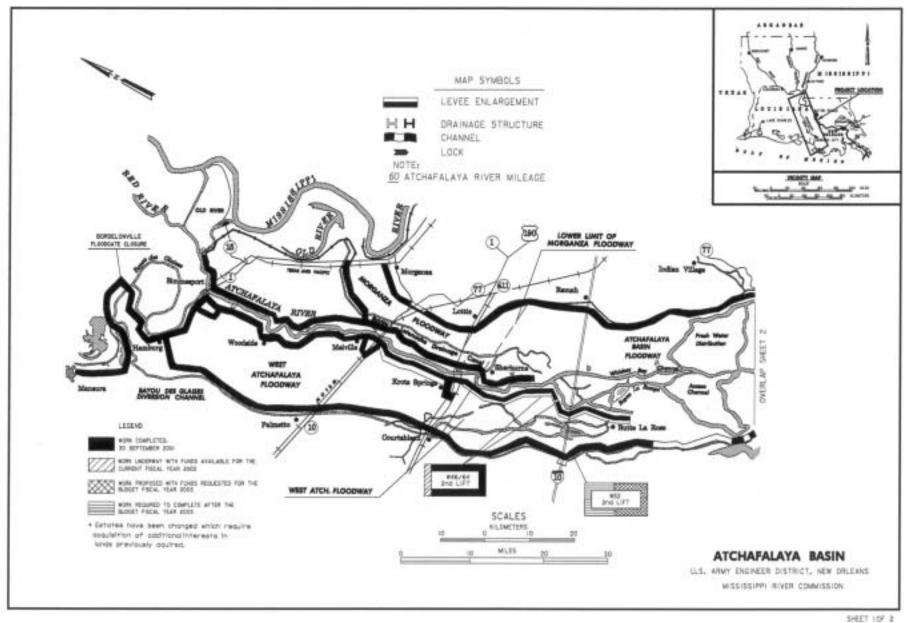
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$1,801,000,000 is an increase of \$11,000,000 from the latest estimate (\$1,790,000,000) presented to Congress (Fiscal Year 2002). This change includes the following items:

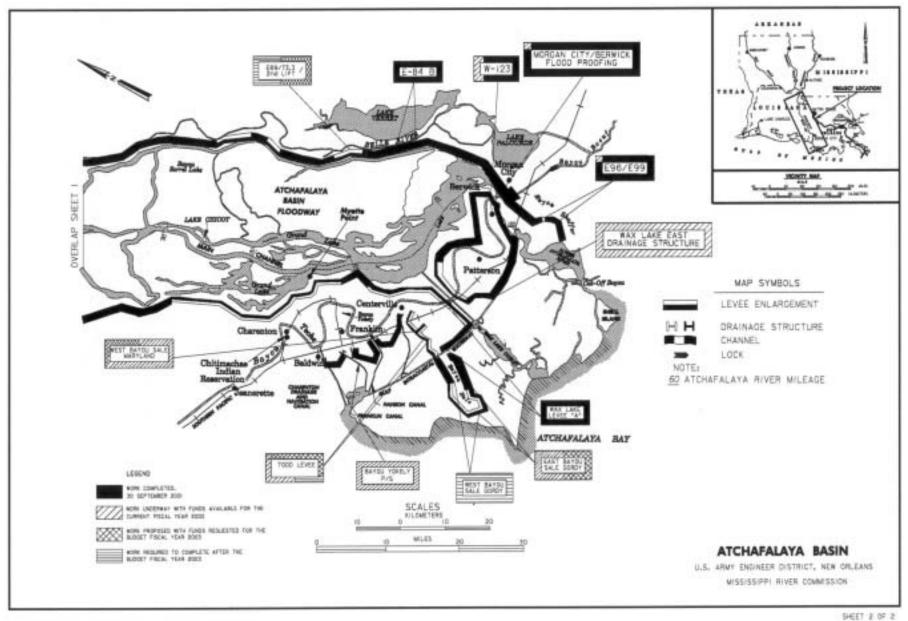
Item	Amount
Price Escalation on Construction Features Design Changes Post Contract Award and Other Estimating Adjustments Price Escalation on Real Estate	\$ 11,339,000 25,035,000 -25,035,000 -339,000
Total	\$ 11,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982. The final Environmental Impact Statement for the Upper Pointe Coupe Loop Area was filed with the Council on Environment Quality on 11 June 1976.

OTHER INFORMATION: Funds to initiate construction were appropriated in 1928.

4 February 2002





APPROPRIATION TITLE: Flood Control, Mississippi River & Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Atchafalaya Basin Floodway System, Louisiana (Continuing)

LOCATION: The project is located in south-central Louisiana and encompasses 595,000 acres in an area bounded on the north by south right-of-way line of the Union Pacific Railroad (just south of US Hwy 19); on the south by Morgan City; and on the east and west by the East and West Atchafalaya Basin Protection Levees.

DESCRIPTION: The plan of improvement consists of acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway for flood control purposes, environmental protection purposes, developmental control purposes, and public access; acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway, for recreation developmental purposes and construction of several campgrounds, boat launching ramps, visitor's center, other recreational facilities and initial construction of two pilot water management units, including construction of miscellaneous canal closures and water circulation improvements, and implementation of future units at the discretion of the Chief of Engineers. These project features will be implemented in accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act, 1985; Water Resources Development Act, 1986; Energy and Water Development Appropriations Act, 1981; Energy and Water Development Appropriations Act, 1997; and Water Resources Development Act, 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 36.6 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

TOTAL BENEFIT-COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project is a feature of the Main Stem system which was authorized in Fiscal Year 1928. Initial funds for the acquisition of real estate interests for flood control, developmental control, environmental protection, and public access were provided in 1985. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$202,000,000		Land Acquisition Recreation	45 4	September 2013 September 2025
Estimated Non-Federal Cost Cash Contribution Other Costs	\$18,206,000 794,000	\$ 19,000,000		Management Units Entire Project	5 30	September 2025 September 2025
Total Estimated Project Cost		\$221,000,000			PHYSICAL D	ATA
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002		\$ 89,818,000 7,600,000 7,107,000 96, 925,000	48	Lands and Damages Relocations: 2 Pipeli Recreational Facilitie 3 campground 7 campground 15 2-lane boat	nes s s – developed s – primitive	
Allocation Requested for FY 2003 Programmed Balance to Complete a Unprogrammed Balance to Complet		\$7,010,000 98,065,000 0	49	Visitors Center     Water Management Units     Miscellaneous canal closures and     water circulation channels		•

JUSTIFICATION: The Atchafalaya Basin Floodway System features result from a comprehensive study with a view to developing a plan for the management and preservation of the water and related land resources of the Atchafalaya River Basin, Louisiana, which would include provisions for reductions of siltation, improvement of water quality, and possible improvements of the area for commercial and sport fishing. The features of the Atchafalaya Basin Floodway System are compatible with the current flood control plan, and include real estate acquisition of lands, flowage easements, and developmental control easements in the floodway south of Krotz Springs, Louisiana, to ensure unhampered use of the floodway during major floods; and environmental protection easements to protect the basin's environmental resources. Provision of additional public access and several campgrounds, boat launching ramps, visitors center, and other recreational facilities are also authorized. The water management units feature involves making use of distinct hydrologics within the floodway to restore historical overflow conditions and thereby enhance aquatic ecosystem productivity.

<sup>&</sup>lt;sup>1</sup> Reflects \$493,000 reduction assigned as savings and slippage.

The Atchafalaya Basin Floodway System is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of the Atchafalaya Basin Floodway System derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The value of lands and improvements protected by authorized works against the design flood is \$139.4 billion in 2000 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of \$347.0 million. This would be equivalent to \$10.5 billion damages in 2000 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were \$643 million (1973 price levels). Damages without projects would have been \$11.3 billion and total damages prevented by projects amounted to \$10.6 billion. Expressed in 2000 prices, damages without the projects would have been \$38.2 billion and damages prevented would have been \$35.8 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control Navigation Area Redevelopment Recreation	\$ 2,734,073,000 884,704,000 3,132,000 3,434,000
Total	\$ 3.625.343.000

# FISCAL YEAR 2003: The requested amount will be applied as follows:

Initiate: Buffalo Cove (Management Units) Lake End Park (Recreation)	\$ 466,000 563,000
Initiate and Complete: Bayou Sorrel Boat Launch (Recreation) Bayou Pigeon Boat Launch (Recreation)	101,000 198,000
Complete: Myette Point Boat Launch (Recreation)	576,000
Lands and Damages Planning, Engineering and Design:	3,022,000
Lands Acquisition	300,000
Management Units	837,000
Recreation	847,000
Supervision and Administration (Recreation)	100,000
Total	\$ 7,010,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Pay one-half of the separable cost allocated to recreation and bear all costs of operation, maintenance, and replacements of recreation facilities.	\$ 18,206,000	\$ 520,500
Provide lands, easements, rights-of-way, and dredged material disposal areas for recreation.	794,000	0
Pay 25 percent of operation and maintenance of Water Management Units.	0	17,700
Total Non-Federal Costs	\$ 19,000,000	\$ 538,200

Annual

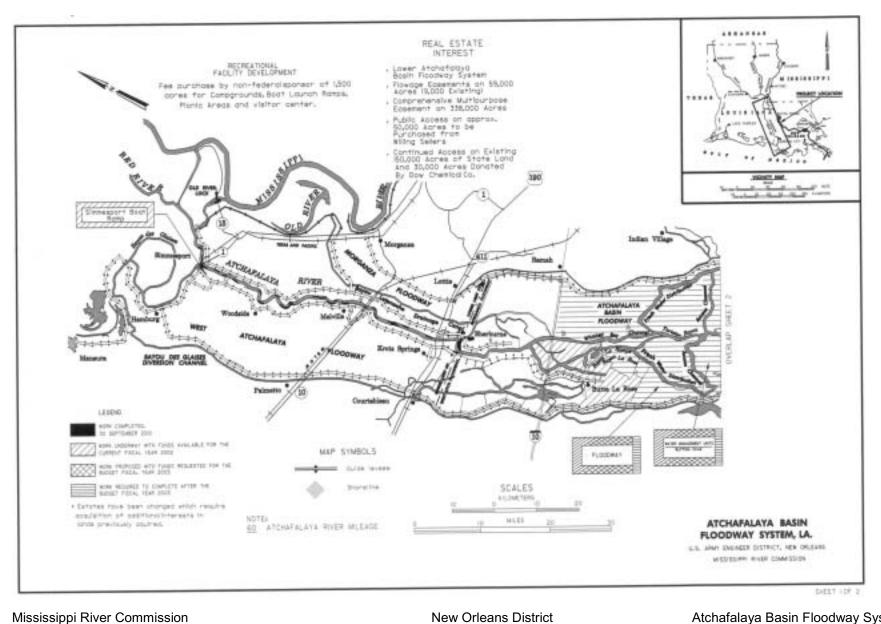
STATUS OF LOCAL COOPERATION: The Avoyelles Parish Police Jury is the non-Federal sponsor for the Simmesport Boat Ramp. The State of Louisiana has provided a letter of intent supporting the recreation feature of the project and agrees to its cost sharing requirements. The State designated the Department of Natural Resources to be the lead State agency to represent the State in the implementation of the project and to negotiate all contracts, agreements, and project cooperation agreements (except Simmesport Boat Ramp) with the Corps.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$202,000,000 is an increase of \$26,000,000 from the latest estimate (\$176,000,000) presented to Congress (Fiscal Year 2002). The change includes the following items:

Price Escalation on Construction Features	\$ 14,000
Price Escalation on Real Estate	662,000
Schedule Changes	10,000,000
Post Contract Awards and Other Estimating Adjustments	15,324,000
Total	\$ 26,000,000

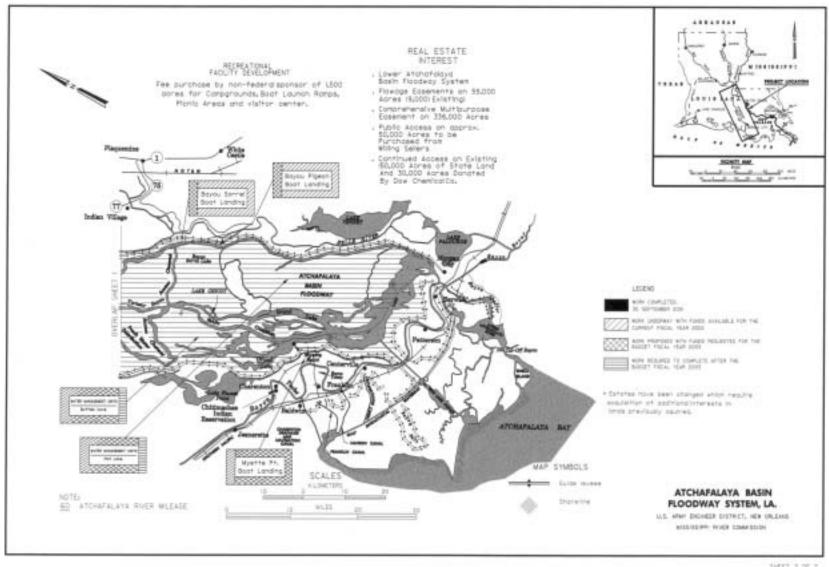
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985.



**New Orleans District** 

Atchafalaya Basin Floodway System, Louisiana



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APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Francis Bland Floodway Ditch (Eight Mile Creek), Arkansas (Continuing)

LOCATION: The project is located in Greene and Craighead Counties in northeastern Arkansas approximately 90 miles northwest of Memphis, Tennessee. The City of Paragould, Arkansas, is drained by Eight Mile Creek.

DESCRIPTION: The project provides for 12.4 miles of channel improvement. There are 4.4 miles within the city limits of Paragould, Arkansas. The remaining 8.0 miles provide a downstream outlet for the city. All work is programmed.

AUTHORIZATION: 1985 Supplemental Appropriations Act and the Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 5.8 to 1 at 8-7/8 percent.

TOTAL BENEFIT-COST RATIO: 3.9 to 1 at 8-7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8-7/8 percent (FY 1986).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available reevaluation approved in January 1995 at 1993 price levels.

SUMMARIZED FINANCIAL DATA	A		STATU (1 Jan	JS uary 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contributions	\$ 858,000	\$10,800,000 6,400,000	Entire	Project	54	September 2006
Other Costs	5,542,000		PHYS	SICAL DATA		
			Lands and Damages:	180 acres Co	ommercial/Res	sidential
Total Estimated Project Cost		\$17,200,000	Relocations:			
			Roads	7 br	idges	
			Railroads	2 br	idges	
			Channels	12.4	miles	

ACCUM PCT OF EST FED COST

### SUMMARIZED FINANCIAL DATA (Continued)

Allocations to 30 September 2001	\$4,151,000	
Conference Allowance for FY 2002	915,000	
Allocation for FY 2002	1,641,000	1
Allocations through FY 2002	5,792,000	54
Allocation Requested for FY 2003	750,000	61
Programmed Balance to Complete After FY 2003	4,258,000	
Unprogrammed Balance to Complete After FY 2003	0	

JUSTIFICATION: Francis Bland Floodway Ditch (Eight Mile Creek) provides drainage primarily for the City of Paragould, Arkansas. A 100-year flood would cause expected annual damages of \$1,859,900 (October 2001 price levels). The project will provide 100-year protection in the urban area of Paragould and maintain current 3-year protection levels in the downstream rural area. Flooding impacts 1,750 residential and commercial structures and contents within the 100-year flood plain. The structure and contents have a value of approximately \$176,690,200 (October 2001 price levels). Total damage from a 100-year flood is estimated at approximately \$13,676,000 (October 2001 price levels). Average annual damage for such properties with project is \$186,200 (October 2001 price levels). Flooding has occurred to some extent on an annual basis. Major floods occurred in 1973, 1974, 1980, and 1991. The plan of improvement addresses the need for flood damage reduction without significant detriment to the natural environment. Total annual average benefits (1993 price levels), all for flood control, are \$2,260,000.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Co		

Item 3, Urban Missouri Pacific Railroad Relocation	\$ 381,000
Item 2, Urban Channel Enlargement	225,000
Planning, Engineering and Design	100,000
Supervision and Administration	44,000
Total	\$ 750,000

Francis Bland Floodway Ditch, Arkansas

<sup>&</sup>lt;sup>1</sup> Reflects \$59,000 reduction assigned as savings and slippage and \$785,000 reprogrammed to the project. Mississippi River Commission Memphis District

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, And Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$4,449,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project.	1,093,000	
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	858,000	\$21,000
Total Non-Federal Costs	\$6,400,000	\$21,000

STATUS OF LOCAL COOPERATION: City officials have identified sufficient funds in current annual tax revenue, which can be used to meet project cash contributions and other requirements. The Arkansas Soil and Water Conservation Commission is the sponsor with the City of Paragould, Arkansas as the subparty. The Project Cooperation Agreement with the Arkansas Soil and Water Commission was executed on 28 June 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$10,800,000 is an increase of \$1,530,000 from the latest estimate (\$9,270,000) presented to Congress (FY 2002). This change includes the following items.

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments	\$ 316,000 1,214,000
Total	\$ 1,530,000

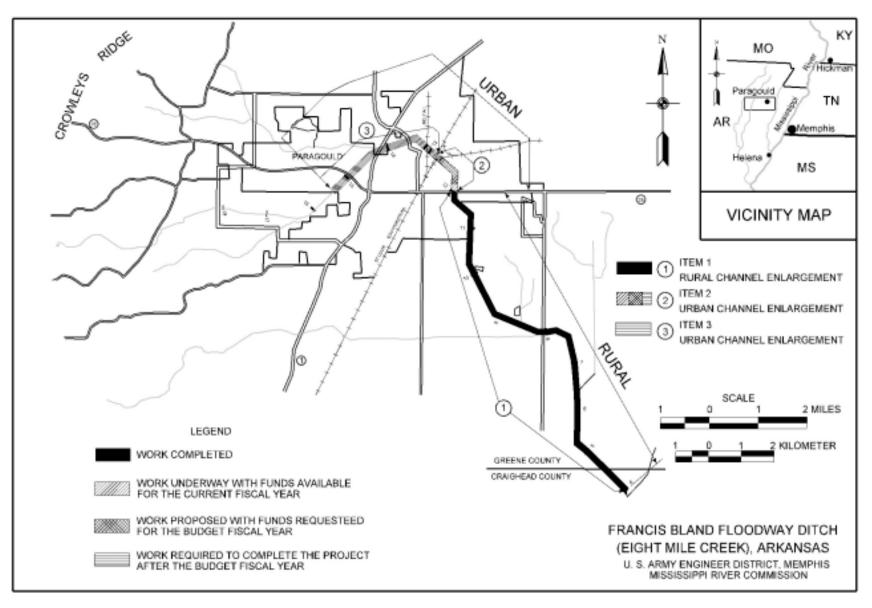
Mississippi River Commission

Memphis District

Francis Bland Floodway Ditch, Arkansas

4 February 2002

319



Memphis District

Francis Bland Floodway Ditch, Arkansas

4 February 2002

321

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Helena and Vicinity, Arkansas – (Continuing)

LOCATION: The project is located in Phillips County in east-central Arkansas, approximately 60 miles south of Memphis, Tennessee.

DESCRIPTION: The project is an urban flood control project. The plan of improvement consists of 1.41 miles of channel improvement within the city limits of Helena, Arkansas. The plan includes 0.69 miles of earthen channel enlargement at the south end of the city limits, 0.19 miles of open concrete channel enlargement and 0.53 miles of underground concrete box culverts. This plan of improvement would provide approximately a 25-year level of protection for the downtown business district of the City of Helena and for the adjacent residential community. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 8.9 to 1 at 7-3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.1 to 1 at 7-3/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the Helena and Vicinity, Arkansas, General Reevaluation Report dated January 1995 at October 1992 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost					
Estimated Non-Federal Cost	\$9,400,000		Entire Project	67	September 2004
Cash Contributions \$ 698,000	3,100,000				
Other Costs 2,402,000					
Total Estimated Project Cost	\$12,500,000		PHYSICAL D	DATA	
			Lands and Damages	: 17 acres	
Allocations to 30 September 2001	\$ 4,700,000		Relocations:	2 bridges a	and 50 utilities
Conference Allowance for FY 2002	1,675,000		Channels:	1.41 miles	
Allocation for FY 2002	1,566,000				
Allocations through FY 2002	6,266,000	67			
Allocation Requested for FY 2003	660,000	74			
Programmed Balance to Complete after FY 2003	2.474.000				
Unprogrammed Balance to Complete after FY 2003	_,, 0				

<sup>&</sup>lt;sup>1</sup>Reflects \$109,000 reduction assigned as savings and slippage. Mississippi River Commission

JUSTIFICATION: The project provides drainage primarily for the City of Helena, Arkansas. Expected annual structural damage in the Standard Project Floodplain is approximately \$2,090,000 in 2001 price levels, over half of which occurs to structures located in the 0-1.1 year flood zone. The project will reduce flooding in the urban area of Helena. The project will provide a 25-year level of protection along Main Outlet Ditch and prevent approximately \$1,425,000 in total expected annual damages (2001 price levels).

Flooding impacts 637 residential and commercial structures and their contents within the Standard Project Floodplain. The structures and contents have a present value of approximately \$72,813,000 (2001 price levels). Total damage from the Standard Project Flood event is estimated at \$13,054,000 (2001 price levels). Average annual damages for such properties with and without project conditions are estimated at \$585,000 and \$2,090,000 (2001 price levels), respectively. Flooding has occurred to some extent on virtually an annual basis over the recent past. Major flooding occurred in 1973, 1974, 1980, and 1989. The plan of improvement addresses the need for flood damage reduction without significant detriment to the natural environment.

The project lies solely within Phillips County, Arkansas, a county with historically high unemployment.

Total average annual benefits (1992 price levels) are as follows:

Annual Benefits	Amount
Flood Damage Prevention Area Redevelopment	\$1,259,000 48,000
Total	\$1,307,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue:

Item 2, Underground Concrete Culvert	\$ 250,000
Planning, Engineering, and Design Supervision and Administration	200,000 210,000
Total	\$ 660.000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$ 841,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project.	\$1,561,000	
Pay 14 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 50 percent, as determined under proposed legislation, or Section 103(m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsor's ability to pay and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	\$ 698,000	\$100,000
Total Non-Federal Costs	\$ 3,100,000	\$100,000

The non-Federal sponsor will be required to make all payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement (PCA) with the City of Helena, the project sponsor was executed on 18 August 1997.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$9,400,000 is an increase of \$810,000 from the latest estimate (\$8,590,000) presented to Congress (FY 2002). This change includes the following items:

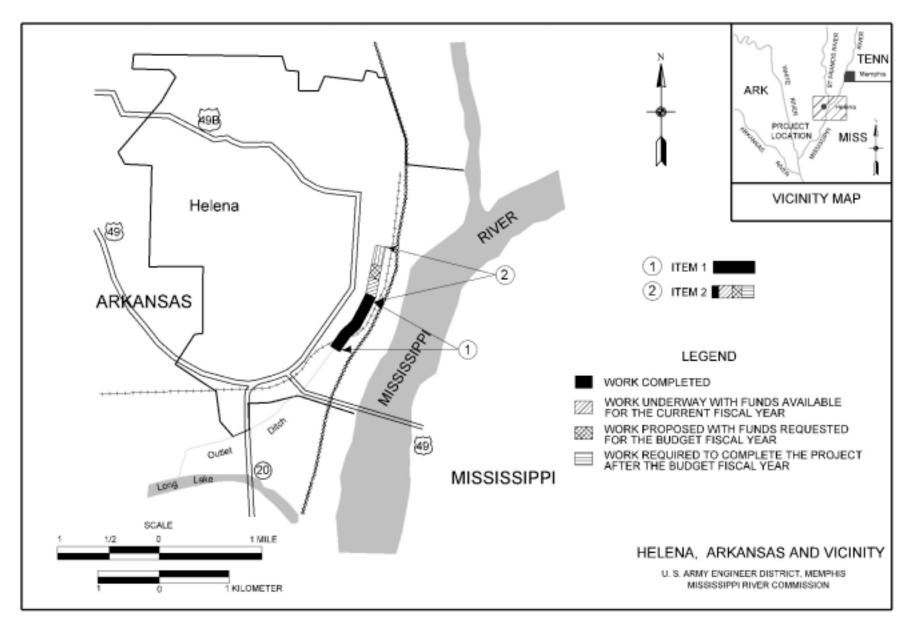
Item	Amount
Price Escalation on Construction Features	\$ 810,000
Total	\$ 810,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment/Finding of No Significant Impact (FONSI) was completed as a part of the January 1995 General Reevaluation Report. Environmental impacts of this project will be minimal since construction will be completed within the already highly developed city limits. Water Quality Certification has been granted by the State of Arkansas.

OTHER INFORMATION: Funds to initiate Preconstruction Engineering and Design were appropriated in FY 1990. Funds to initiate construction were appropriated in Fiscal Year 1997.

Mississippi River Commission Memphis District Helena & Vicinity, Arkansas

4 February 2002 324



APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: St. Francis Basin, Arkansas and Missouri (Continuing)

LOCATION: The project is located in the St. Francis Basin in southeastern Missouri and northeastern Arkansas, and extends from the hills southwest of Cape Girardeau, Missouri, near Wappapello, Missouri, to the confluence of the St. Francis and Mississippi Rivers about 10 miles above Helena, Arkansas.

DESCRIPTION: The project provides for protection against headwater floods by means of a detention reservoir at Wappapello, MO, improvement of the flood-carrying capacities of the St. Francis and Little Rivers and there principal tributaries by means of levees, channel improvements, new channels, auxiliary channels, and floodways, including the main ditches in the Little River Basin. Protection against backwater flooding of the Mississippi River is provided by realignment of the St. Francis River channel supplemented with auxiliary channels, levee construction, and a pumping plant and floodgate. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1946, 1950, 1958, 1965, 1968, Water Resources Development Act of 1974; Omnibus Appropriations Act 2001, PL 106-554.

REMAINING BENEFIT-REMAINING COST RATIO: 5.6 to 1 at 2-1/2 percent.

TOTAL BENEFIT-COST RATIO: 2.4 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project feature was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1938. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the project. The benefit-cost ratio for the St. Francis Basin components computed for the base estimate was 2.4 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in July 1985 at 1983 price levels.

SUMMARIZED FINANCIAL I	DATA		STATUS (1 January 2002)	PCT CMPL	COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contributions Other Costs	\$ 263,000 1,613,000	\$409,600,000 1,876,000	Big Slough and Mayo Ditch Wappapello Lake Little River Drainage St. Francis River and and Tributaries	100 100 100 91	September 2012
Total Estimated Project Cost		\$ 411,476,000	Entire Project	93	September 2012

Mississippi River Commission

Memphis District

St. Francis Basin, Arkansas and Missouri

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ACCUM PCT OF EST FED COST

#### SUMMARIZED FINANCIAL DATA (CONT)

Allocations to 30 September 2001	\$375,055,000	
Conference Allowance for FY 2002	4,230,000	
Allocation for FY 2002	3,956,000	1
Allocations through FY 2002	379,011,000	93
Allocation Requested for FY 2003	1,970,000	93
Programmed Balance to Complete After FY 2003	28,619,000	
Unprogrammed Balance to Complete After FY 2003	0	

#### PHYSICAL DATA

Levees: Channels: Pumping Plants:

Average Height: 11.7 feet

St. Francis River and Tributaries: 638 miles

Length: 438.0 miles

Little River Drainage: 299 miles

1 – 25 cubic feet per second

1 – 12,000 cubic feet per second

Big Slough and Mayo Ditches: 28 miles 1 – 700 cubic feet per second

Relocations: Dam and Reservoir: 1 – Dam Flood Control and Diversion
Roads: 21.3 miles and 296
Structures: 8

Roads: 21.3 miles and 296

bridges

Railroads: 39 bridges

Lands and Damages: 188,927 acres Other: 1 – Siphon

JUSTIFICATION: The project is a flood control project and is a unit in the Comprehensive Plan for Flood Control, Mississippi River and Tributaries. Protection against headwater floods of the St. Francis and Little Rivers will be afforded to an area of approximately 1,436,855 acres of agricultural lands including numerous small towns, several major railroads, highways, and utilities, located in Missouri and Arkansas. The construction of adequate outlets for the many drainage improvements undertaken by local interests will provide relief from overflow on approximately 196,700 acres in the Little River Basin, 29,000 acres in the Elk Chute Basin, and 35,000 acres in the Big Slough area. In addition, relief from flooding by backwaters of the Mississippi River is afforded to approximately 532,000 acres in the Lower St. Francis Basin below the latitude of St. Francis Lake by the Madison to Marianna Cutoff and related work including the pumping plant. Flooding has occurred every year with few exceptions, and the flood of record occurred in 1937 causing numerous breaks in the locally constructed substandard levees with resultant damages of over \$2,000,000. It is estimated that the recurrence of the 1937 flood, under present conditions of development in the floodplain, would cause damages of over \$73,754,000 (2001 price levels) if the flood occurred during the crop-growing season. Continuing construction of this project is needed to prevent recurring flood losses. Project benefits will result from flood damages prevented, increased utilization of land, and fish and wildlife enhancement. Counties within the project area that are subject to substantial and persistent unemployment are: Lee, Mississippi and St. Francis in Arkansas. Average annual benefits (1983 price levels) are as follows (for total project):

Memphis District

St. Francis Basin, Arkansas and Missouri

<sup>&</sup>lt;sup>1</sup> Reflects \$274,000 reduction assigned as savings and slippage. Mississippi River Commission

Annual Benefits	Amount	
Flood Control	\$24,106,000	
Recreation	2,152,000	
Fish and Wildlife Area Redevelopment	333,000 785,000	
Advance Replacement	1,304,000	
Betterments	423,000	
Relocation Assistance	24,000	
	•	
Total	\$29,127,000	

FISCAL YEAR 2003: The requested amount will be applied as follows:

# ST. FRANCIS RIVER AND TRIBUTARIES

# Continue:

Lands and Damages Hwy 79, 10 & 15 Mile Bayou, AR, Relocations	\$ 400,000 526,000
Complete: Honey Cypress, AR, Channel Enlargement Ditch 13, AR, Channel Enlargement	251,000 152,000
Planning, Engineering and Design Supervision and Administration	567,000 74,000

NON-FEDERAL COST: Prior to the Flood Control Act of 1946, local interests provided lands, easements, and rights-of-way and provided for relocation of interfering facilities. After 1946, local cooperation was limited to minor maintenance of levees except for providing right-of-way for specific features, i.e., recreation facilities at the W. G. Huxtable Pumping Plant, Inter River Culvert and St. Francis Lake Control Structure. A tabulation of these and other non-Federal costs is as follows:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$1,492,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	121,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities.	85,000	
Pay all costs of minor maintenance of levees.		\$970,000
Pay a portion equivalent to 6.4% of the first costs associated with the Improvements in the Big Lake area for fish and wildlife enhancement.	178,000	
Total Non-Federal Costs	\$1,876,000	\$970,000

STATUS OF LOCAL COOPERATION: Necessary assurances have been furnished by 24 levee and drainage districts to perform minor maintenance as required by law. These agencies are furnishing all requirements of local cooperation necessary for meeting the present project schedule.

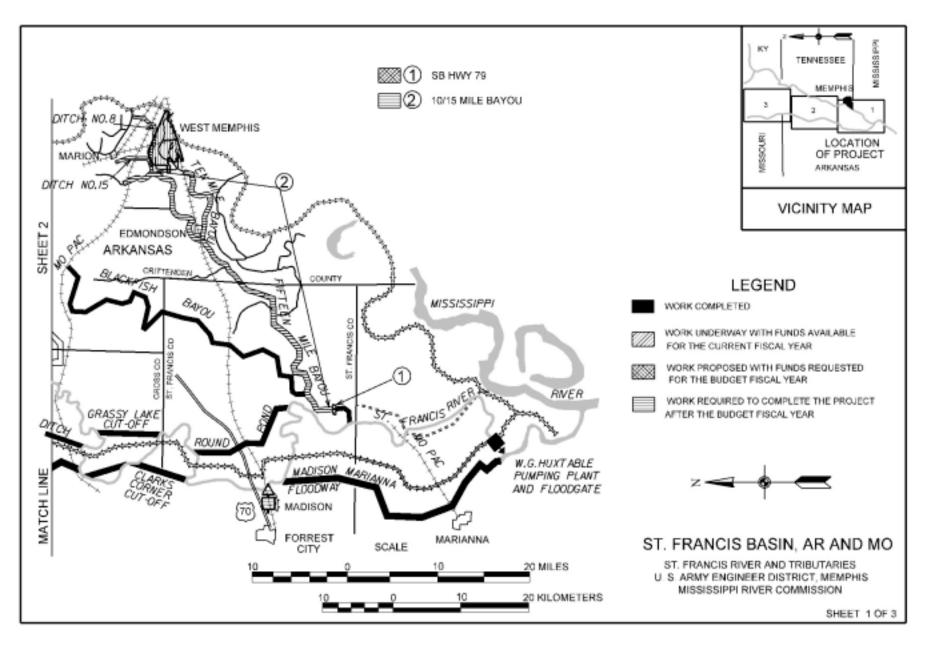
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Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments Price Escalation on Real Estate	\$ 200,000 6,300,000 1,500,000
Total	\$ 8,000,000

Mississippi River Commission

Memphis District

St. Francis Basin, Arkansas and Missouri

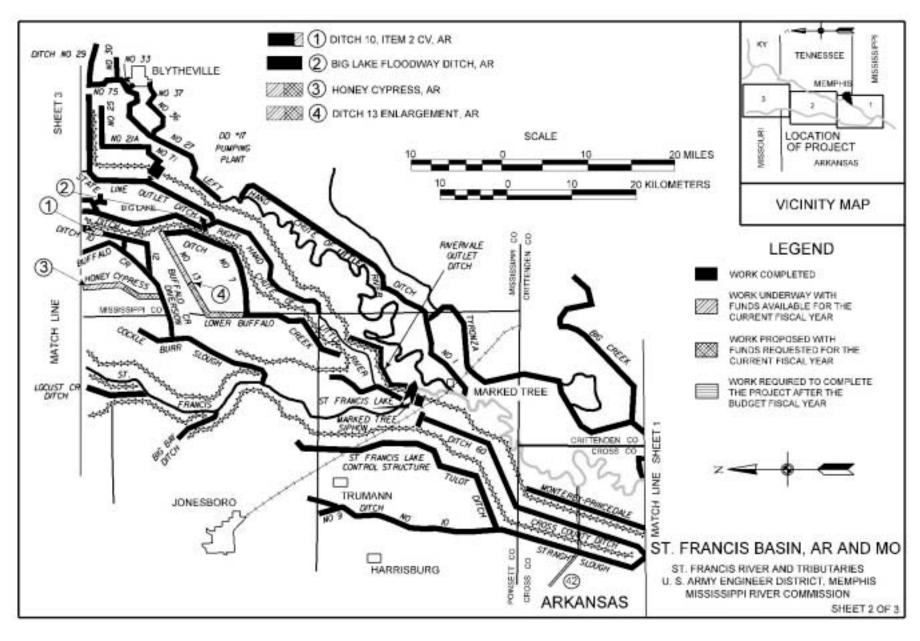
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Er December 1973.	nvironmental Impact Statement was filed with the	ne Council on Environmental Quality on 11
OTHER INFORMATION: Initial construction funds were appropriated in	n Fiscal Year 1938.	
Mississippi River Commission	Memphis District	St. Francis Basin, Arkansas and Missouri
	4 February 2002	330



Memphis District

St. Francis Basin, Arkansas and Missouri

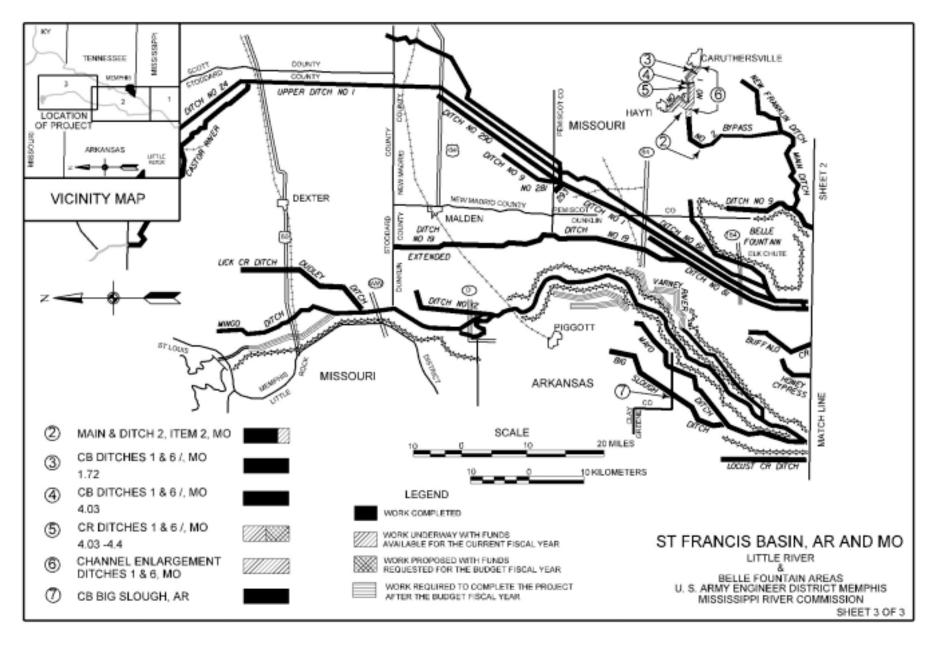
331



Memphis District

St. Francis Basin, Arkansas and Missouri

332



Memphis District

St. Francis Basin, Arkansas and Missouri

333

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Louisiana State Penitentiary Levee, Louisiana (Continuing)

LOCATION: The project is located near Angola, Louisiana, in West Feliciana Parish, approximately 40 miles northwest of Baton Rouge, Louisiana and borders the Louisiana State Penitentiary along the Mississippi River and State of Mississippi state line.

DESCRIPTION: The project provides for improving about 12 miles of existing levees along the Mississippi River which currently afford flood protection to the Penitentiary on the left descending bank below Old River. The existing levees are owned and maintained by the State of Louisiana and are substandard with regard to Federal specifications. The project, by improving the existing levees to Federal standards, will reduce the risk of flooding with its attendant threat to the lives of over 5,100 inmates and about 1,750 employees and residents (527 reside on penitentiary grounds) and risk of property damage. All work is programmed.

AUTHORIZATION: Water Resources Development Acts of 1986, 1990 and 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 1.7 to 1 at 7-1/8 percent

TOTAL BENEFIT - COST RATIO: 1.6 to 1 at 6-7/8 percent

INITIAL BENEFIT - COST RATIO: 1.37 at 7-5/8 percent (FY 1999)

BASIS OF BENEFIT - COST RATIO: The initial benefit-cost ratio was presented in the January 1982 Final Feasibility Report. The current estimate of 1.6 to 1 results from an update performed.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$18,800,000		Entire Project	88	September 2003
Estimated Non-Federal Cost Cash Contributions Other Costs	\$5,318,000 882,000	\$ 6,200,000		PHYSICAL DATA Levees: Average Height - 15 Length - 12.0 miles	feet	
Total Estimated Project Cost		\$25,000,000		Ç		
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002		\$13,525,000 3,022,000 2,826,000	07			
Allocations through FY 2002 Allocation Requested for FY 2003 Programmed Balance to Complete after FY Unprogrammed Balance to Complete after F		16,351,000 2,449,000 0 0	87 100			

JUSTIFICATION: Past high-water events have threatened the lives of over 5,100 maximum security inmates and about 1,750 employees and residents (527 reside on the penitentiary grounds) and physical plant valued at \$260 million. The need to evacuate during flood events causes severe disruption and serious public threat to residents throughout the state. The 1997 high-water event demonstrated that improvement of the state-constructed levee to Flood Control, Mississippi River and Tributaries standards is imperative. During this event, serious under-seepage (which created numerous sand boils) threatened the integrity of the levee. The levee failure threat precipitated the night-time evacuation of 3,000 inmates housed in dormitories to a "tent city" on high ground within the prison. Emergency levee protection activities and support by the Louisiana National Guard, prison laborers and staff, contractors, and the Corps ultimately preserved the levee. This emergency event cost the State of Louisiana about \$2 million. Had the levee failed, the nearly 2,000 prisoners housed in cells and over 500 resident staff could have drowned. Average annual benefits, all for flood control, are \$3,483,000.

<sup>&</sup>lt;sup>1</sup> Reflects \$196,000 reduction assigned as savings and slippage.

# FISCAL YEAR 2003: The requested amount will be applied as follows:

Com	plete	:

Levee Downstream of Camp C	\$2,379,000
Surveys and Layouts Planning, Engineering and Design Supervision and Administration	10,000 20,000 40,000
Total	\$2,449,000

NON-FEDERAL COST: In accordance with the Water Resources Development Acts of 1986 (PL 99-662) and 1990 (PL 101-640), the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide without cost to the United States, all rights-of-way for levee foundations and levees.	\$ 882,000	
Maintain all flood control works after their completion, except controlling and regulating spillway structures, including special relief levees.		\$ 14,000
Pay 22 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103, of the Water Resources Development Act of 1986.	5,318,000	
Total Non-Federal Costs	\$ 6,200,000	\$ 14,000

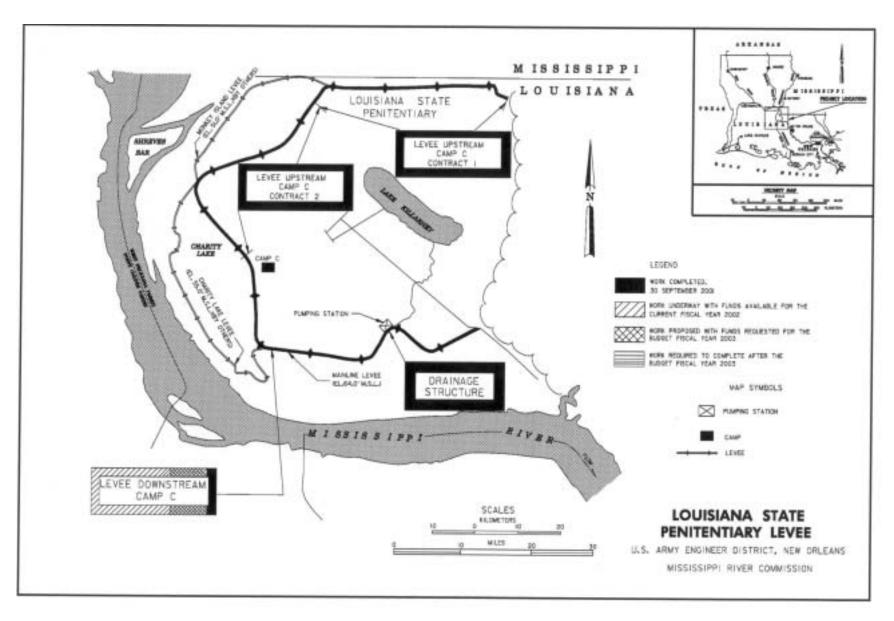
STATUS OF LOCAL COOPERATION: The Limited Reevaluation Report was approved on July 2, 1999 and formed the basis for execution of the Project Cooperation Agreement which was approved on July 30, 1999. The local sponsor, the Louisiana Department of Public Safety and Corrections has provided cash in the amount of \$5,171,000 in addition to furnishing the lands and damages necessary to support its share of the project cost.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$18,800,000 is a decrease of \$700,000 from the latest estimate (\$19,500,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Post Contract Award and Other Estimating Adjustments	\$ -700,000
Total	\$ -700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Impact Statement was included in the Final Feasibility Report dated January 1982. An Environmental Assessment and three Supplemental Environmental Assessments have been prepared to disclose the potential environmental consequences of the levee project as described in the Limited Reevaluation Report and as being constructed. It was determined that the project would have no adverse impacts upon significant resources, with implementation of the mitigation feature. Findings of No Significant Impact were distributed, which completed the public disclosure of that determination.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1991 and funds to initiate construction were appropriated in FY 1998. Water Resources Development Act of 1999 provides for the sponsor to receive credit for work accomplished in the project area since authorization. Documentation to support qualified creditable work has been requested from the Louisiana Department of Public Safety and Corrections. The estimated amount of the creditable work is \$3,000,000. After submission of the creditable amount to both Committees on Appropriations, the Project Cooperation Agreement will be revised, thus the credit will probably be issued in FY 2003.



**New Orleans District** 

Louisiana State Penitentiary, Louisiana

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Mississippi Delta Region, Louisiana (Salinity Control Structures) (Continuing)

LOCATION: The project is located in the lower Mississippi River delta region in Plaquemines and St. Charles Parishes, Louisiana. The Caernarvon structure is located in Plaquemines Parish on the east bank of the Mississippi River in the vicinity of Caernarvon, Louisiana. The Davis Pond structure is located in St. Charles Parish on the west bank just downstream of Luling, Louisiana.

DESCRIPTION: The plan of improvement originally consisted of four salinity control structures (Caernarvon, Davis Pond, Homeplace, and Bohemia) with appurtenant levees and channels, to divert freshwater from the Mississippi River into coastal bays and marshes for fish and wildlife restoration. The Caernarvon and Davis Pond salinity control structures are programmed, including post-construction environmental monitoring which will continue for four years after completion of construction of each structure. The Homeplace and Bohemia structures were deauthorized on 1 May 1997.

AUTHORIZATION: Flood Control Act of 1965, and Water Resources Development Acts of 1974, 1986 and 1996.

REMAINING BENEFIT - REMAINING COST RATIO: 14.0 to 1 at 8-7/8 percent (Davis Pond).

TOTAL BENEFIT-COST RATIO: 2.8 to 1 at 3-1/4 percent for Caernarvon (Fiscal Year 1969), and 5.6 to 1 at 8-7/8 percent for Davis Pond.

INITIAL BENEFIT - COST RATIO: 3.4 to 1 at 3-1/4 percent for Caernarvon (Fiscal Year 1969), and 3.0 to 1 at 8-1/8 percent for Davis Pond (Fiscal Year 1983).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluations: Caernarvon - approved in November 1985, at 1985 price levels; and Davis Pond - approved in September 1992 at 1990 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost Cash Contribution Other Costs	\$25,700,000 10,100,000	\$107,200,000 35,800,000		Caernarvon Davis Pond Entire Project	100 95 98	February 1997 September 2006 September 2006
Total Estimated Project Cost		\$143,000,000				
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002 Allocation Requested for FY 2003 Programmed Balance to Complete A Unprogrammed Balance to Complete		\$ 94,340,000 2,900,000 2,712,000 97,052,000 3,500,000 6,648,000 0	91 94			

# PHYSICAL DATA

	Caernarvon	Davis Pond
Lands and Damages	2,092 acres	10,213 acres
Relocations		
Roads/Bridges	1,600 linear feet	2,920 linear feet
Railroads	2,500 linear feet	3,600 linear feet
Utilities	4,600 linear feet	7,980 linear feet
Fish & Wildlife Facilities		
Structures	5 box culverts	4 box culverts
	15 feet by 15 feet	14 feet by 14 feet
	8,000 cubic feet	10,650 cubic feet
	per second	per second

**New Orleans District** 

Mississippi Delta Region, Louisiana

 <sup>&</sup>lt;sup>1</sup> Includes \$58,000 expended on Bohemia prior to 1970.
 <sup>2</sup> Reflects \$188,000 reduction assigned as savings and slippage.
 Mississippi River Commission

Caernarvon	Davis Pond
	1 pumping station, 570 cfs capacity
1.7 miles	2.2 miles
3.7 miles	16.9 miles

JUSTIFICATION: The project will divert freshwater from the Mississippi River to coastal bays and marshes for fish and wildlife restoration. Benefits will include restoration of former ecological conditions by controlling salinity and supplementing nutrients. The bays are important to oyster production and as breeding areas for shrimp and food fishes, while the marsh areas produce natural food for fur-bearing animals and migratory waterfowl. A total of 981,500 acres of marshes and bays will be benefitted. The diversions will take place under regulated conditions developed from monitoring the impact on the environment and the fish and wildlife. Average annual benefits are as follows:

Annual Benefits	Amount
Fish and Wildlife Caernarvon Davis Pond	\$ 8,706,000 14,997,000
Recreation Caernarvon Davis Pond	449,000 298,000
Total	\$24,450,000

**Pumping Stations** 

Channels Levees

### FISCAL YEAR 2003: The requested amount will be applied as follows:

#### **Davis Pond**

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2<sup>nd</sup> Lift Levees \$ 200,000

Complete:

Total Non-Federal Costs

Miscellaneous Relocations – Hired Labor 12,000
Site Operations Building 320,000
Floodwall Capping 57,000

Planning, Engineering and Design 2,791,000 Supervision and Administration 120,000

Total \$3,500,000

NON-FEDERAL COST: Based on the cost sharing concept adopted for the Caernarvon Structure, the non-Federal sponsor will voluntarily contribute 25 percent of the first cost of the project as well as the required 25 percent of the cost of operating, maintaining, repairing, rehabilitating, and replacing the project after completion.

Annual Operation, Maintenance,

\$251,600

Payments Repair, During Rehabilitation

Construction and and

Requirements of Local Cooperation Reimbursements Replacement Costs

Contribute 25 percent of the costs allocated to fish and wildlife restoration and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.

 Davis Pond
 \$29,950,000
 \$182,600

 Caernarvon
 5,850,000
 69,000

The non-Federal sponsor for the Caernarvon and Davis Pond Structures has also agreed to make all required payments concurrently with project construction.

Mississippi River Commission New Orleans District Mississippi Delta Region, Louisiana

4 February 2002 342

\$35,800,000

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement for the Caernarvon Structure was signed by the State of Louisiana on 2 June 1987 and by the Assistant Secretary of the Army for Civil Works on 10 June 1987. The current non-Federal cost estimate of \$5,850,000, which includes a cash contribution of \$5,850,000, is a decrease of \$275,000 from the non-Federal cost estimate of \$6,125,000 noted in the Project Cooperation Agreement, which included a cash contribution of \$6,125,000. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. The State of Louisiana has provided cash contributions of \$5,850,000 through for the Caernarvon Structure. The State has also performed biological monitoring, with an estimated value of \$1,044,000. The Project Cooperation Agreement for the Davis Pond Structure was signed 17 April 1993, by the State of Louisiana and for the Acting Assistant Secretary of the Army. The Water Resources Development Act of 1996 authorized the Corps to credit the State of Louisiana for up to \$7,500,000 in oyster relocation costs. We are currently preparing an amendment to the Davis Pond PCA to incorporate these requirements. We anticipate execution of the amendment in September 2002. The State of Louisiana plans to fund both the construction and the operations and maintenance of the project through the Wetlands Conservation and Restoration Trust Fund. Our recent analysis of the non-Federal sponsor's financial capability affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. The State of Louisiana has provided cash contributions of \$19,850,000 through 30 September 2001, for the Davis Pond Structure.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$107,200,000 is an increase of \$7,400,000 from the latest estimate (\$99,800,000) presented to Congress (Fiscal Year 2002). This change includes the following items:

Item	Amount
Post Contract Award and Other Estimating Adjustments Price Escalation on Construction Features	\$ 7,225,000 175,000
Total	\$ 7,400,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the Louisiana Coastal Area Study was filed with the Environmental Protection Agency on 5 April 1985. This statement is adequate for the Caernarvon and Davis Pond structures.

OTHER INFORMATION: Local interests, during the period 1954-1970, spent an estimated \$420,000 for construction and maintenance of freshwater diversion structures and channel improvements on the east bank of the Mississippi River in the vicinity of Bohemia and Bayou Lamoque.

Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1969 and funds to initiate construction were appropriated in Fiscal Year 1987.

#### SUMMARIZED FINANCIAL DATA

Davis Pond:

Estimated Federal Cost \$89,650,000 Estimated Non-Federal Cost 29,950,000

Cash Contributions \$19,850,000 Other Costs 10,100,000

Total Estimated Cost \$119,600,000

Caernarvon:

Estimated Federal Cost \$17,550,000 Estimated Non-Federal Cost 5,850,000

Cash Contributions \$5,850,000 Other Costs \$5,850,000

Total Estimated Cost \$23,400,000

#### REMAINING BENEFIT - REMAINING COST RATIO:

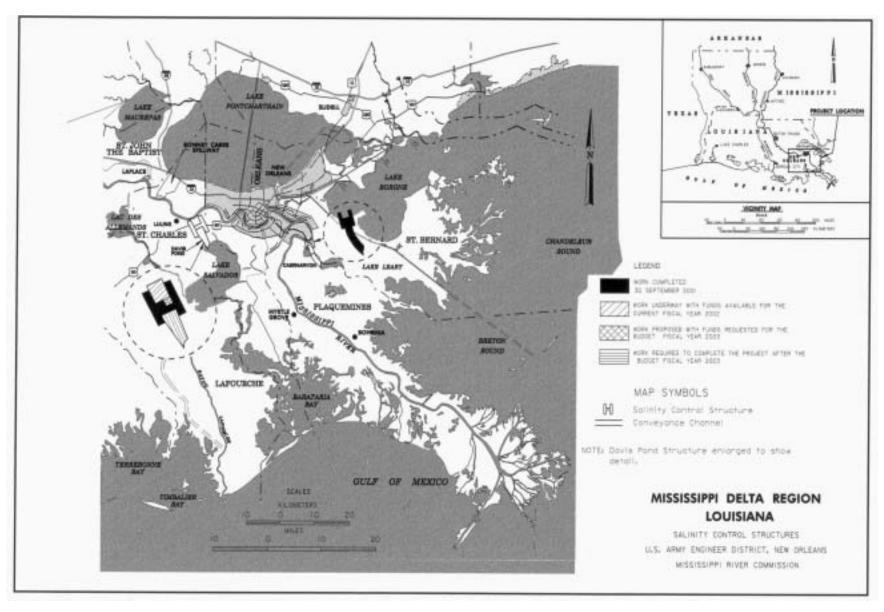
Davis Pond: 14.0 to 1 at 8-7/8 percent.

Caernarvon: Not applicable because construction is complete.

### **TOTAL BENEFIT - COST RATIO:**

Davis Pond: 5.6 to 1 at 8-7/8 percent.

Caernarvon: Not applicable because construction is complete.



**New Orleans District** 

Mississippi Delta Region, Louisiana

4 February 2002

345

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Mississippi and Louisiana Estuarine Areas, Mississippi and Louisiana (Continuing)

LOCATION: The project is located in St. Charles Parish, Louisiana about 33 miles upstream of the City of New Orleans, Louisiana, at the upstream end of the Bonnet Carre' spillway structure.

DESCRIPTION: The project plan consists of six-gated 18' x 18' box culverts with associated inflow and outflow channels designed to divert water from the Mississippi River into Lake Pontchartrain. A sediment trap will be located 2,300 feet downstream from the diversion structure. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1988.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8-7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 8-7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 8-5/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in February 1991, at 1990 price levels.

SUMMARIZED FINANCIAL DATA	<b>N</b>		ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost		\$ 80,200,000 31,500,000		Entire Project	7	September 2017
Cash Contribution Other Costs	\$ 27,959,000 3,541,000	,,			PHYSICAL D	ATA
Total Estimated Project Cost	-,,	\$111,700,000		Relocations: U.S. Highway 61	Bridge and LA	Parish Road 12
Allocations to 30 September 2001		7,979,000		2 Railroad Bridges		
Conference Allowance for FY 2002		25,000		2 Power lines, 9 pipelines, 1 waterline,		
Allocation for FY 2002		23,000	2	4 fiber optic cables		
Allocations through FY 2002		8,002,000	10	Fish and Wildlife Facilities: 6 box culverts 18 feet by 18 feet		
Allocation Requested for FY 2003		25,000	10	30,000 cubic feet per second		
,		72,173,000		Channels: 6.0 miles with a depth of about 30 ft		
Unprogrammed Balance to Complete after FY 2003		0		Levees: 0.4 miles		

JUSTIFICATION: The productivity of fish and wildlife is being adversely affected by wetland loss. The natural processes of subsidence, compaction, erosion, and saltwater intrusion, which have been accelerated by channel dredging and levee building are major contributors to the land loss. The project area includes Lakes Maurepas, Pontchartrain, and Borgne, Mississippi Sound and adjacent wetlands that are influenced by these water bodies. The estuaries and wetlands, which are among the most productive in the nation in terms of fish and wildlife resources, make a significant contribution to the overall economies of Louisiana and Mississippi. Historically, a large portion of Louisiana's \$500 million and Mississippi's \$68 million commercial fish and wildlife harvests have been from the project area. The contribution that the project area makes to commercial fish and wildlife harvest has declined due to increased salinities and land loss. The project would reduce saltwater intrusion and significantly increase the production of oyster, white shrimp, blue crabs, croakers and menhaden.

About 10,500 acres of marsh and wooded swamps adjacent to Lakes Maurepas and Pontchartrain would be saved over the 50-year project life since the freshwater nutrients and sediments would result in a healthier marsh and reduce land loss. Oyster production is estimated to be increased by 5.7 million pounds annually in Louisiana and 1.9 million pounds annually in Mississippi. The average annual benefits, all commercial fish and wildlife enhancement, resulting from environmental restoration, are \$9,589,000.

Mississippi River Commission

New Orleans District

Mississippi and Louisiana Estuarine Areas, Mississippi and Louisiana

Not creditable to the State's share of the project costs since utility relocations are the responsibility of the utility owners.

<sup>&</sup>lt;sup>2</sup> Reflects \$2,000 reduction assigned as savings and slippage.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Planning, Engineering and Design \$ 25,000

Total \$ 25,000

NON-FEDERAL COST: Based on the cost sharing concept adopted for similar projects, the non-Federal sponsor will contribute 25 percent of the first cost of the project, as well as the required 25 percent of operating, maintaining, repairing, rehabilitating, and replacing the project after completion. The non-Federal costs will be shared between the states of Louisiana (20 percent) and Mississippi (5 percent), based on the estimated benefits to accrue to each state.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Pay 25 percent of the first costs allocated to fish and wildlife restoration, and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	\$31,500,000	\$254,000
Total Non-Federal Costs	\$31,500,000	\$254,000

STATUS OF LOCAL COOPERATION: A two and a half year reanalysis of the project was led by the Environmental Protection Agency in response to a January 1994 letter from Representative Robert Livingston. The reanalysis involved representatives of the Environmental Protection Agency, the Corps of Engineers, the States of Louisiana and Mississippi, and two environmental groups. Despite the fact the reanalysis led to a Corps recommendation that negotiations resume on the Project Cooperation Agreement, the State of Louisiana withdrew its support of the project in July 1996. The State of Mississippi continues to support the project. In the House Conference Report 104-782, the Conference Committee directed the Corps of Engineers to submit a report on the project status to Congress, and to provide its assessment of whether the project, as currently formulated, would achieve its goals. This report was submitted to Congress on 5 May 1997. Based on the findings of all the various studies to date, the Corps of Engineers has determined that the project, as authorized, would achieve its objectives in a timely and cost effective manner.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$80,200,000 is an increase of \$8,900,000 from the latest estimate (\$71,300,000) presented to Congress (Fiscal Year 2002). This change includes the following item:

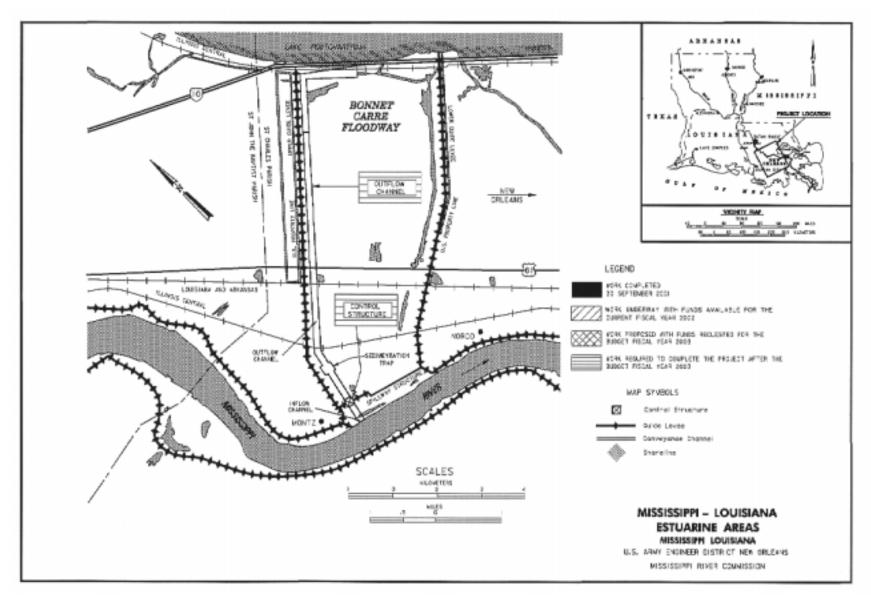
Item Amount

Price Escalation on Construction Features \$8,900,000

Total \$8,900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 27 April 1985. The Finding of No Significant Impact was signed on 11 July 1996.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1985, and funds to initiate construction were appropriated in Fiscal Year 1990.



APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Yazoo Basin, Mississippi (Continuing)

LOCATION: The project is located in Mississippi and extends generally from Memphis, Tennessee, southward to Vicksburg, Mississippi, and from the escarpment at Greenwood, westward to the Mississippi River. The counties included are DeSoto, Tunica, Tate, Coahoma, Quitman, Panola, Bolivar, Sunflower, Tallahatchie, Yalobusha, Leflore, Grenada, Carroll, Washington, Humphrey, Holmes, Issaquena, Sharkey, Yazoo, and Warren.

DESCRIPTION: The project provides for protection against headwater floods of streams in the basin; against backwater floods of the Mississippi; and for major drainage in the delta area. The Yazoo Basin is divided into three major flood control components (the Yazoo Headwater, the Yazoo Backwater, and the Big Sunflower River, etc., Including Steele Bayou), the Streambank Erosion Control Evaluation and Demonstration Program, which has been completed, and the Demonstration Erosion Control Program. All of the work in the project is programmed except for remaining recreation facilities at Grenada Lake pending development of cost sharing agreements with local interests for construction and non-Federal operation and maintenance consistent with the provisions of the Federal Water Project Recreation Act of 1965 (Public Law 89-72), as amended; and remaining work on Rocky Bayou pending a decision to continue construction in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986.

AUTHORIZATION: Flood Control Acts of 1936, 1937, 1938, 1941, 1944, 1946, 1950, 1962, 1965, and the Water Resources Development Acts of 1974, 1986, and 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 3.3 to 1 at 2-1/2 percent.

TOTAL BENEFIT-COST RATIO: 4.5 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 2-1/2 percent (FY 1967).

BASIS OF BENEFIT-COST RATIO: Benefits and costs for the Yazoo Backwater Pumping Plant are from the latest evaluation approved in July 1983 at 1974 price levels. Benefits for the remaining features of the Yazoo Basin project are based on "Upper Steele Bayou Project Reformulation Study," December 1992; and "Upper Yazoo Projects Reformulation Study," December 1993. Costs are based on October 2001 costs deflated to 1974 price levels.

		ACCUM PCT OF EST	STATUS	PCT	PHYSICAL COMPLETION
SUMMARIZED FINANCIAL DATA		FED COST	(1 January 2002)	CMPL	SCHEDULE
Estimated Federal Cost	\$ 1,876,632,000		Yazoo City	100	
Programmed Construction \$ 1,857,819,000			Belzoni	100	
Unprogrammed Construction 18,813,000			Will M. Whittington Auxiliary Channel	99	Indefinite
Estimated Non-Federal Cost	\$ 5,594,000		Sardis Lake	100	maemme
Programmed Construction \$900,000	\$ 5,594,000		Arkabutla Lake	100	<b></b>
Cash Contributions \$816,000			Enid Lake	100	
Other Costs 84,000			Grenada Lake	98	Indefinite
Other 903t3 04,000			Greenwood	100	
Estimated Non-Federal Cost			Streambank Erosion	.00	
Unprogrammed Construction \$ 4,694,000			Control Evaluation		
Cash Contributions \$ 1,583,000			and Demonstration	100	
Other Costs 3,111,000			Upper Yazoo Projects	36	Sep 2016
5,,555			Main Stem	73	Sep 2031
Total Estimated Programmed Construction Cost	\$1,858,719,000		Tributaries	62	Sep 2031
Total Estimated Unprogrammed Construction Cost	23,507,000		All Work Except Ascalmore-		•
	, ,		Tippo and Opossum Bayous	62	Sep 2031
Total Estimated Project Cost	\$ 1,882,226,000		Ascalmore-Tippo and		·
•			Opossum Bayous	71	May 2019
			Demonstration Erosion Control	99	Sep 2002
			Big Sunflower River, Etc.,		
			Including Steele Bayou	95	Sep 2022

SUMMARIZED FINANCIAL DATA (CONT)		ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Allocations to 30 September 2001 Conference Allowance for FY 2002	\$ 971,468,000 35,249,000		Yazoo Backwater Yazoo Backwater Including	23	Sep 2031
Allocation for FY 2002	32,963,000 <sup>1</sup>		Muddy Bayou Control Structure	51	Sep 2031
Allocations Thru FY 2002	1,004,431,000	54	Rocky Bayou Separable Element	27	Indefinite
			Backwater Pumping Plant		
Allocations Requested for FY 2003	\$ 10,550,000	54	Separable Element	6	Sep 2031
Programmed Balance to Complete After FY 2003	842,838,000		Yazoo Backwater Mitigation		
Unprogrammed Balance to Complete After FY 2003	18,813,000		Separable Element	100	Sep 2002
			Reformulation Study	65	Sep 2020
			Entire Project	65	Sep 2031

#### PHYSICAL DATA

# Yazoo City:

Lands and Damages: 361 acres Relocations: 1.1 miles roads

Levees: 4.1 miles Channels: 1.6 miles

Pumping Plant: One 540 cubic feet per second (cfs)

#### Belzoni:

Lands and Damages: 3.3 acres

Levees: 0.6-mile levee and 0.5-mile floodwall

Will M. Whittington Auxiliary Channel: Lands and Damages: 11,996 acres

Relocations:

Roads: 3.0 miles and 12 bridges Railroads: 0.4 mile and 1 bridge

Fish and Wildlife Facilities: 1 water control structure Channels: 30.8 miles Levees: 61.3 miles

<sup>&</sup>lt;sup>1</sup> Reflects \$2,286,000 reduction for savings and slippage. Mississippi River Commission

Sardis Lake:

Lands and Damages: 98,584 acres

Relocations:

Roads: 3.2 miles and 1 bridge Railroads: 3.2 miles and 1 bridge Reservoir: 58,500-acre pool area Dam: Earthfill, 15,300 feet long; 97 feet

average height

Roads, Railroads, and Bridges: 7.6 miles roads

and 8 bridges

Recreation Facilities: 19 sites

Buildings: 4

Arkabutla Lake:

Lands and Damages: 52,629 acres

Relocations:

Roads: 5.5 miles and 5 bridges Railroads: 5.8 miles and 2 bridges Reservoir: 33,400-acre pool area Dam: Earthfill, 11,500 feet long; 67 feet

average height

Roads: 4 miles

Channel and Canals: 1.5 miles Recreation Facilities: 11 sites

Buildings: 4

Enid Lake:

Lands and Damages: 43,870 acres

Relocations:

Roads: 19.1 miles and 9 bridges Reservoir: 28,000-acre pool area Dam: Earthfill, 8,400 feet long; 85 feet

average height

Roads: 1 mile

Recreation Facilities: 10 sites

Buildings: 4

Grenada Lake:

Lands and Damages: 90,356 acres

Relocations:

Roads: 83.2 miles and 47 bridges Railroads: 21.6 miles and 21 bridges

Cemetery: 1

Reservoir: 64,600-acre pool area

Dam: Earthfill, 13,900 feet long; 80 feet

average height

Roads: 4.5 miles and 1 bridge Recreation Facilities: 20 sites

Buildings: 4

Mississippi River Commission Vicksburg District Yazoo Basin, Mississippi

4 February 2002 354

Greenwood:

Lands and Damages: 1,435 acres

Relocations:

Roads: 0.5 mile and 4 bridges Bank Stabilization: 0.8 mile

Channels: Big Sand Creek Diversion (2.9 miles) Levees and Floodwalls: 28.4 miles, height

4-6 feet

Pumping Plants: Storm Water: 3-capacity 67, 89,

and 675 cfs

Upper Yazoo Projects:

Lands and Damages: 24,171 acres

Relocations:

Roads: 8.0 miles and 1 bridge

Utilities:

16 pipelines 20 power lines 9 telephone lines

Channels: 2 cutoffs, 197.4 miles; bottom width of

75 feet to 150 feet

Levees: 26.6 miles levees and 0.2-mile floodwall,

average height 3.5 feet

Flood Control and Diversion Structure: One control

structure with three 32-foot-wide gate bays,

66 water control structures, and 2 sedimentation structures
Bank Stabilization: 6.8 miles

Main Stem:

Lands and Damages: 16,560 acres

Relocations:

Roads: 28.9 miles and 10 bridges

Railroads: 1.2 miles

Channels: 43 cutoffs, 251 miles channel

clearing and 21 miles channel enlargement (total miles 288.3)

Levees: 156.1 miles; variable height, 3 to

28 feet

Bank Stabilization: 1.8 miles

Tributaries:

All Work Except Ascalmore-Tippo and Opossum

Bayous

Lands and Damages: 40,177 acres

Relocations:

Roads: 7.3 miles and 57 bridges Railroads: 2.2 miles and 6 bridges

Channels: 442.6 miles

Levees: 147.8 miles, variable height, 3 to

25 feet

Pumping Plant: 1 storm water (McKinney

Bayou) 250 cfs

second; 3 Pelucia Creek Pumping Plants, 75, 15, and

10 cfs

Bank Stabilization: 8.2 miles

9 Grade Control Structures

Ascalmore-Tippo and Opossum Bayous:	Demonstration Erosion Control:
Lands and Damages: 2,601 acres	Coldwater River Watershed:
Relocations:	Bank Stabilization 9.7 miles
Roads: 11 bridges	Major Grade Control Structures 26
Railroads: 1 bridge	Minor Grade Control Structures 204
Channels: 50.6 miles	Hickahala-Senatobia Watershed:
Levees: 12.6 miles; average height 7 feet	Bank Stabilization 2.8 miles
	Channel Improvement 13.9 miles
Demonstration Erosion Control:	Major Grade Control Structures 28
Abiaca Creek Watershed:	Minor Grade Control Structures 73
Bank Stabilization 1.0 miles	Hotophia Creek Watershed:
Levees 9.5 miles	Bank Stabilization 4.0 miles
Major Grade Control Structures 3	Major Grade Control Structures 9
Minor Grade Control Structures 9	Minor Grade Control Structures 20
Batupan Bogue Watershed:	Hurricane-Wolf Watershed:
Bank Stabilization 15.5 miles	Bank Stabilization 3.2 miles
Major Grade Control Structures 29	Major Grade Control Structures 3
Minor Grade Control Structures 42	Minor Grade Control Structures 37
Black Creek Watershed:	Long Creek Watershed:
Bank Stabilization 28.4 miles	Bank Stabilization 7.2 miles
Levees 1.5 miles	Major Grade Control Structures 8
Floodwater Retarding Structures 2	Minor Grade Control Structures 11
Major Grade Control Structures 9	Otoucalofa Creek Watershed:
Minor Grade Control Structures 130	Bank Stabilization 7.5 miles
Burney Branch Watershed:	Channel Improvement 0.8 mile
Channel Improvement 0.3 mile	Major Grade Control Structures 3
Cane-Mussacuna Watershed:	Minor Grade Control Structures 17
Minor Grade Control Structures 11	Channel Improvement 0.8 mile
Major Grade Control Structures 4	Pelucia Creek Watershed:
Bank Stabilization 0.8 mile	Major Grade Control Structures 1
	Bank Stabilization 1.4 miles
	Yalobusha Watershed:
	Technical Work Plan under Preparation
	Major Grade Control Structures 5
	Minor Grade Control Structures 40

Mississippi River Commission Vicksburg District Yazoo Basin, Mississippi

4 February 2002 356

Big Sunflower River, Etc., Including Steele Bayou: Lands and Damages: 34,974 acres Relocations: Roads: 2.0 miles and 68 bridges Railroads: 1 bridge Fish and Wildlife Facilities: 9 water control structures Channels: (miles) Big Sunflower River 216 Quiver River 81 Steele Bayou 100 Deer Creek 7 Boque Phalia 95 Little Sunflower River 28 Hushpuckena River 28 **Tributaries** 172 Gin and Muddy Bayous 12.3 Total 739.3 1 channel weir Levees: 9.0 miles, average height 7 feet; 4 gated culverts and 4 fixed crest spillways Bank Stabilization: 1.0 mile

Yazoo Backwater Pumping Plant:

Lands and Damages: 378 acres project lands

Relocations:

Roads: 1.0 mile and 1 bridge

Channels: 1.9 miles

Levees: 0.5 miles, variable height 7 to

30 feet

Pumping Plant: One 10,000 cfs

Yazoo Backwater Including Muddy Bayou Control Structure:

Lands and Damages: 30,203 acres

Relocations:

Roads: 24.3 miles and 2 bridges Railroads: 0.8 mile and 1 bridge

Fish and Wildlife Facilities: 2 Water Control Structures

7 Greentree Reservoirs5 Slough Control Areas

4 Pumping Stations

Channels: 38.9 miles, average depth, 25 feet Levees: 78.5 miles levees, variable height, 5 to

30 feet; 5 floodgates, openings vary in size from 72 square feet to 2,700 square

feet

Yazoo Backwater Including Muddy Bayou Control Structure:

Recreation Facilities: 2 boat-launching ramps Floodway Control and Diversion Structures:

Muddy Bayou Control Structure (opening size

480 square feet)

Rocky Bayou Area:

Lands and Damages: 1,140 acres

Relocations:

Roads: 7.0 miles Levees: 19.0 miles

Yazoo Backwater, Fish and Wildlife Mitigation:

Lands and Damages: 8,807 acres

Streambank Erosion Control Evaluation

and Demonstration:

Bank Stabilization: 65.0 miles

Mississippi River Commission Vicksburg District Yazoo Basin, Mississippi

4 February 2002 357

JUSTIFICATION: The Yazoo Headwater feature will protect 1,209,000 acres against floods, substantially benefit 303,000 acres and protect Greenwood, Belzoni, Yazoo City and numerous smaller communities. Channel improvement work on the Big Sunflower River and its tributaries will protect 195,000 acres against the design flood and an additional 395,000 acres will be benefited because of improved drainage conditions. Also, approximately 368,000 acres in the Yazoo Backwater Area will be protected against frequent flooding and substantial benefits will accrue to an additional 224,000 acres from improved drainage. Had there been no protection in 1958, the floods of April-June and September would have caused damages amounting to \$22,821,000. Should these floods recur under present conditions, but with the flood control works assumed complete, damages amounting to \$181,779,000 would be prevented. In addition, the four Yazoo Basin lakes are being used extensively for recreation. Visitor-day attendance increased from 2,857,000 in calendar year 1958 to 11,630,000 visitor days in FY 2001. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control Fish and Wildlife Recreation Area Redevelopment Bank Stabilization Works	\$113,791,000 7,142,000 18,557,000 1,234,000 1,478,000
Total	\$142,202,000

In 1991, the Office of Management and Budget directed the Corps undertake a reformulation of all unconstructed features of the Yazoo Basin Project. The reformulation study would evaluate alternative plans for (a) greater levels of flood protection for urban areas, (b) reduced levels of agricultural intensification and (c) reduced adverse impacts on the environment. The reformulation study was divided into four phases. The first and second phases were the Upper Steele Bayou Project and Upper Yazoo Projects. These studies were completed in December 1992 and December 1993, respectively, and construction is proceeding. Reformulation studies on the Yazoo Tributaries have been delayed pending advancement of construction on the Yazoo Projects. Completion of the Yazoo Backwater Reformulation study, or fourth phase, is expected in Fiscal Year 2002.

# FISCAL YEAR 2003: The requested amount will be applied as follows:

# Upper Yazoo Projects:

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Lands and Damages	\$ 100,000
Relocations Item 5	250,000
Channel Item 5A	4,000,000
Channel Item 5B	1,650,000
Item 7 Structures	1,500,000

Planning, Engineering and Design	1,500,000
Supervision and Administration	850,000

Subtotal 9,850,000

Main Stem:

Planning, Engineering and Design 25,000

Subtotal 25,000

Tributaries: Planning, Engineering and Design	\$	200,000
Subtotal		200,000
Big Sunflower, Etc., Including Steele Bayou: Planning, Engineering and Design		200,000
Subtotal		200,000
Yazoo Backwater Pump: Planning, Engineering and Design		250,000
Subtotal		250,000
Reformulation: Planning, Engineering and Design		25,000
Subtotal		25,000
TOTAL	\$ 10	0,550,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the initial authorization and subsequent authorized modifications of the Yazoo Basin project including the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Will M. Whittington: Pay 25 percent of the first costs allocated to fish and wildlife enhancement and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	\$ 225,000	\$74,000
Subtotal Non-Federal Costs	\$ 225,000	\$74,000
Big Sunflower River, Etc., Including Steele Bayou: Provide 25 percent of lands allocated to fish and wildlife enhancement.	\$ 43,000	
Pay 25 percent of the first costs allocated to fish and wildlife enhancement and pay 25 percent of the costs of operation, maintenance, and maintain and operate fish and wildlife facilities and perform minor maintenance on the project.	\$ 450,000	\$46,185
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	\$ 30,000	
Subtotal Non-Federal Costs	\$ 523,000	\$46,185

Mississippi River Commission Vicksburg District Yazoo Basin, Mississippi

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Main Stem: Provide lands, easements, rights-of-way, and dredged material disposal areas. Subtotal Non-Federal Costs	\$ 11,000 \$ 11,000	
Yazoo Backwater Including Muddy Bayou Control Structures: Pay 25 percent of the first costs allocated to fish and wildlife enhancement and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities. Subtotal Non-Federal Costs	\$ 141,000 \$ 141,000	\$ 29,092 \$ 29,092
Rocky Bayou: Provide lands, easements, rights-of-way, and dredged material disposal areas.	\$ 1,411,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$ 1,700,000	
Pay 8.4 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.  Subtotal Non-Federal Costs	\$ 1,583,000 \$ 4,694,000	\$ 37,404 \$ 37,404
Total Non-Federal Costs	\$ 5,594,000	\$ 186,681

4 February 2002

### STATUS OF LOCAL COOPERATION:

Flood Control:

Local cooperation is not required for the Yazoo Headwater Unit.

Assurances to operate the Big Sunflower River Unit and perform minor maintenance have been accepted from the Yazoo-Mississippi Delta Levee District and the Board of Mississippi Levee Commissioners. Formal assurances for work in the Steele Bayou Basin were accepted 8 June 1972 without the requirement that local interests "construct or have constructed by others, the necessary associated interior drainage works."

For the Yazoo Backwater unit, assurances of local cooperation have been accepted from the Board of Mississippi Levee Commissioners and the Yazoo-Mississippi Delta Levee District. Supplemental assurances covering the requirements of local cooperation as provided for in the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (PL 91-646), were accepted 7 August 1972. The Board of Levee Commissioners for the Yazoo-Mississippi Delta, non-Federal sponsor for Rocky Bayou, and the Board of Levee Commissioners for the Mississippi Levee District, non-Federal sponsor for Yazoo Backwater, have been notified of the cost-sharing requirements of the Water Resources Development Act of 1986. The Board of Commissioners for the Mississippi Levee District indicated by letter dated 3 November 1988 they cannot agree to any form of cost sharing for the Yazoo Backwater Project. However, they later agreed to pay up to 5 percent toward the remaining construction cost and operating cost as per 16 July 1990 letter from Senator Thad Cochran to Senator J. Bennett Johnston, Chairman, Subcommittee on Energy and Water Development. The Water Resources Development Act of 1996, Section 202a(2), contained language (physical construction defined) which relieved the local sponsor from cost sharing the project based on redefinition of when physical construction began. Under the 1996 provision, the cost would be 100 percent Federal.

### Recreation:

The State of Mississippi, which provided formal assurances in 1967 that it would operate and maintain Corps constructed recreation facilities at the Yazoo Basin lakes, notified the Vicksburg District in the early 1980's that it was unable to fully comply with the assurances and to continue the operation and maintenance function for some of the sites. Under the terms of an escape clause in the leases, the state was allowed to withdraw its operation and maintenance support at some sites.

Fish and Wildlife:

Local cooperation agreements will be obtained when planning is more advanced.

COMPARISON OF FEDERAL COST ESTIMATES: The current cost estimate of \$1,876,632,000 is an increase of \$55,603,000 from the latest estimate (\$1,821,029,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Price Escalation on Real Estate Features Post Contract Award and Other Estimating Adjustments	\$ 26,608,000 9,363,000 19,632,000
Total	\$55,603,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Final Environmental Impact Statements have been filed with the Council on Environmental Quality or with the Environmental Protection Agency as follows:

Project Unit Date

Upper Yazoo Projects

Main Stem

Big Sunflower (Upper Steele Bayou)

Yazoo Backwater

Tributaries

Supplement No. 1 to FEIS, 25 Feb 1994

FEIS, 29 Dec 1975

Supplement No. 1 to FEIS, 26 Feb 1993

Draft Supplement No. 1 to FEIS, Sep 2000

FEIS, 16 Jan 1976

Demonstration Erosion Control Project<sup>2</sup>
Hickahala-Senatobia Creeks Watershed

Hickahala-Senatobia Creeks Watershed FEIS, Jul 1992
Abiaca Creek Watershed FEIS, Jul 1993
Coldwater River Watershed FEIS, Apr 1996
Yalobusha River Watershed Draft EIS, Oct 2001

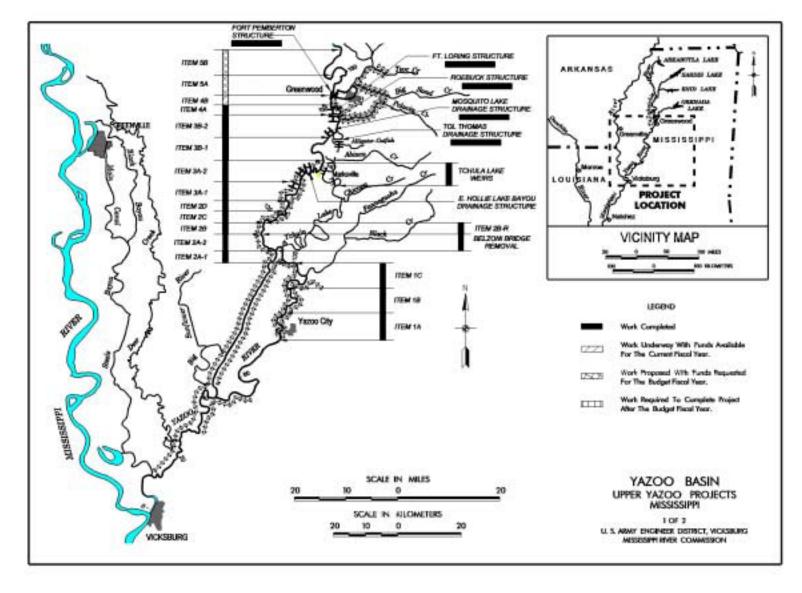
OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1936.

Mississippi River Commission Vicksburg District Yazoo Basin, Mississippi

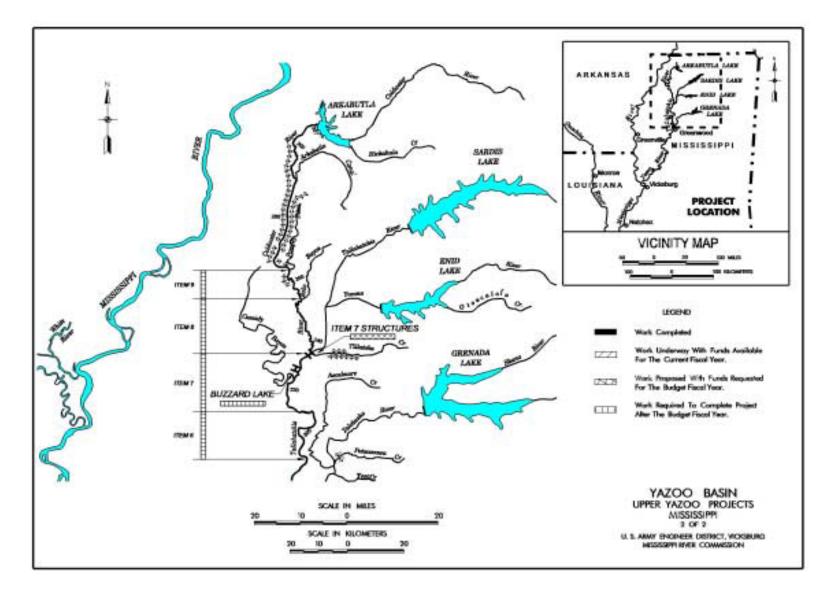
4 February 2002

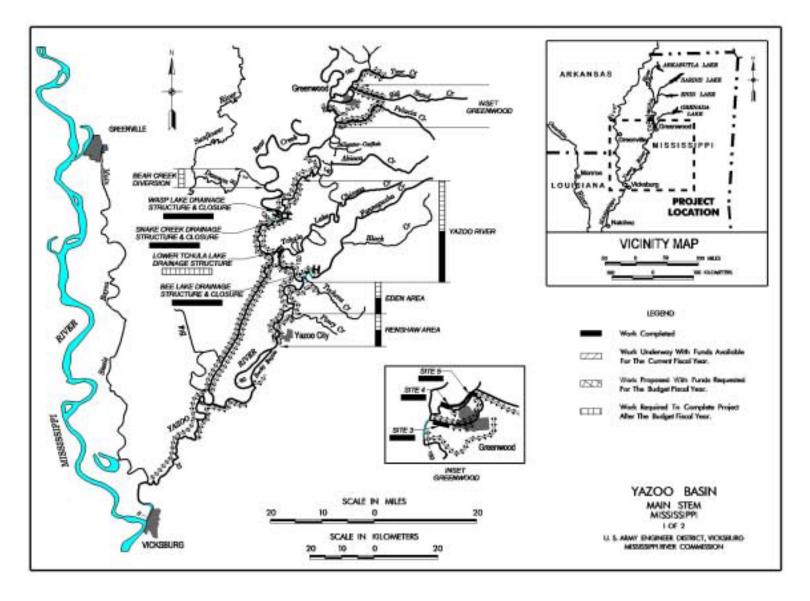
A Supplemental EIS covering the Tributaries portion of the Yazoo Basin projects will be prepared subsequent to construction advancement of the Upper Yazoo Projects.

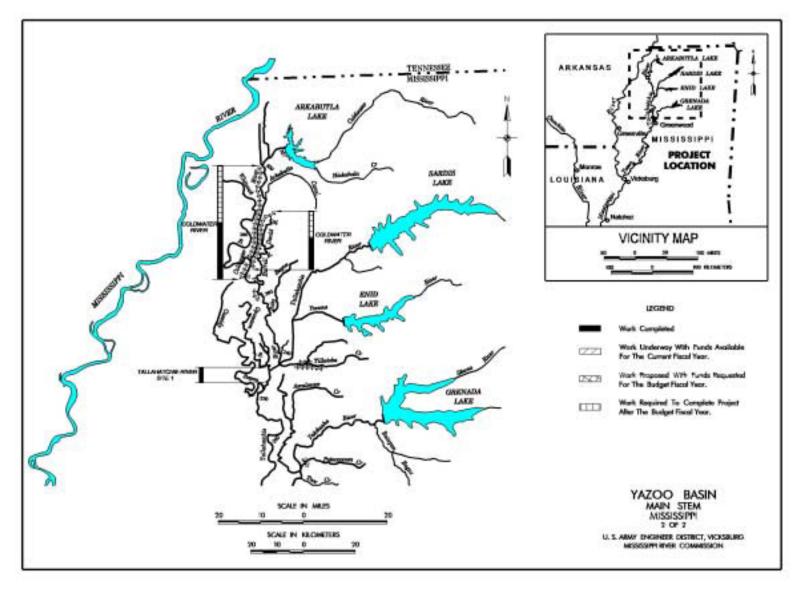
<sup>&</sup>lt;sup>2</sup> General structural measures (e.g., bank stabilization and grade control structures) being employed in the overall DEC project have been covered by environmental assessments.

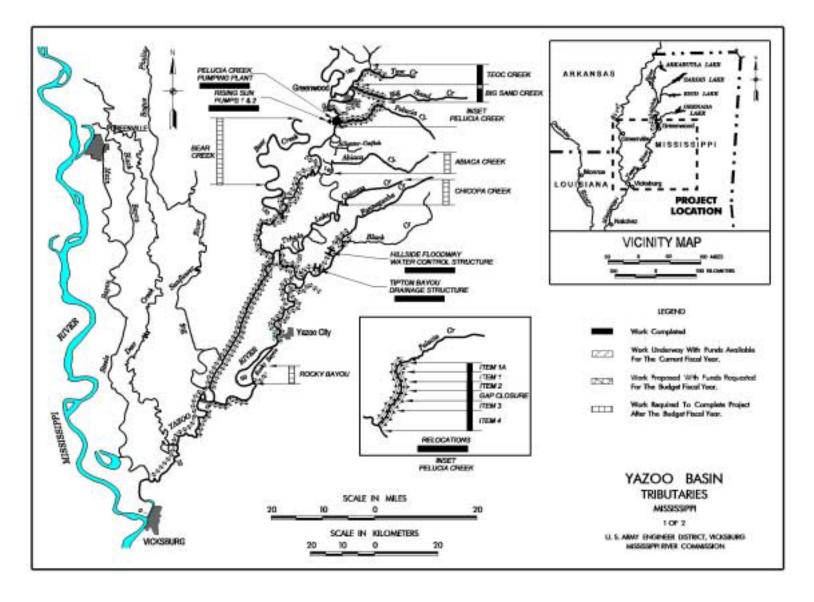


Mississippi River Commission Vicksburg District Yazoo Basin, Mississippi

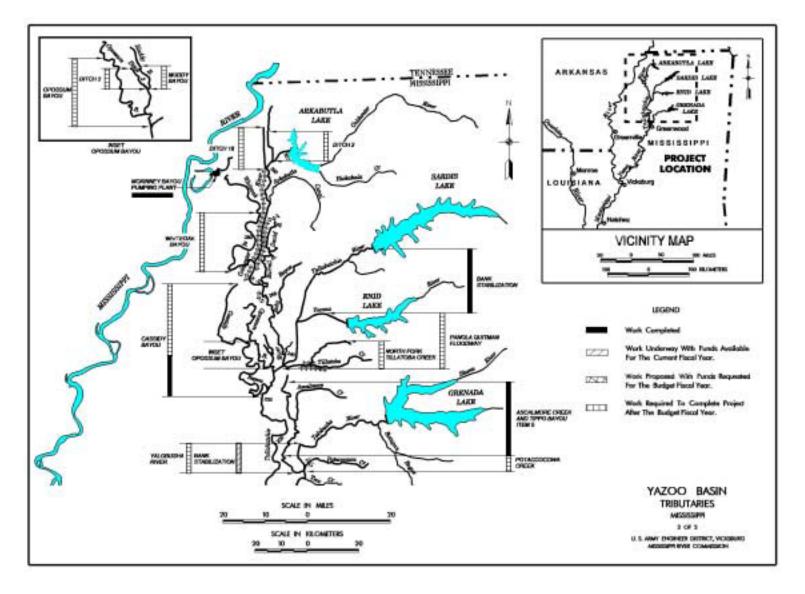


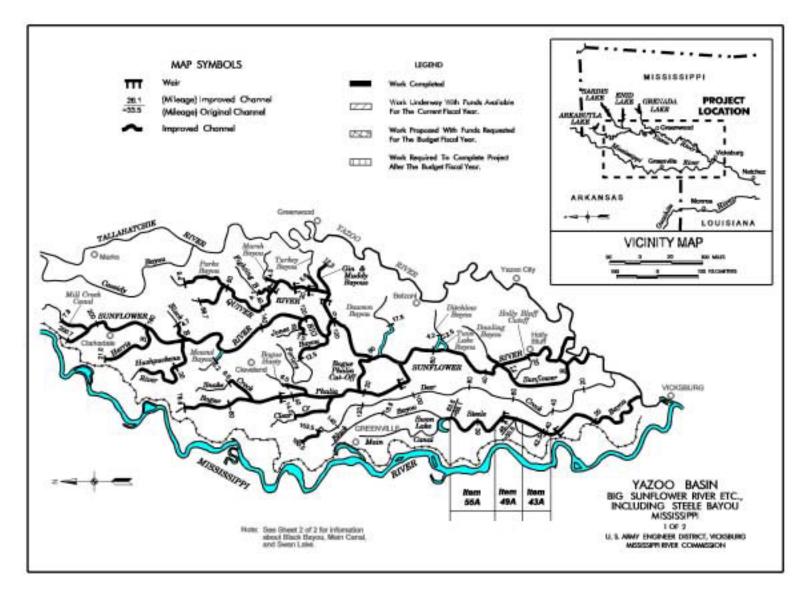


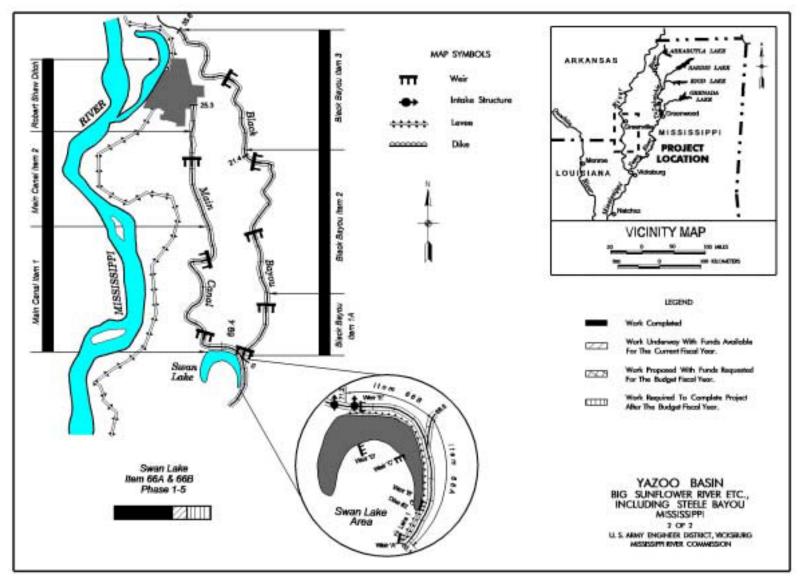




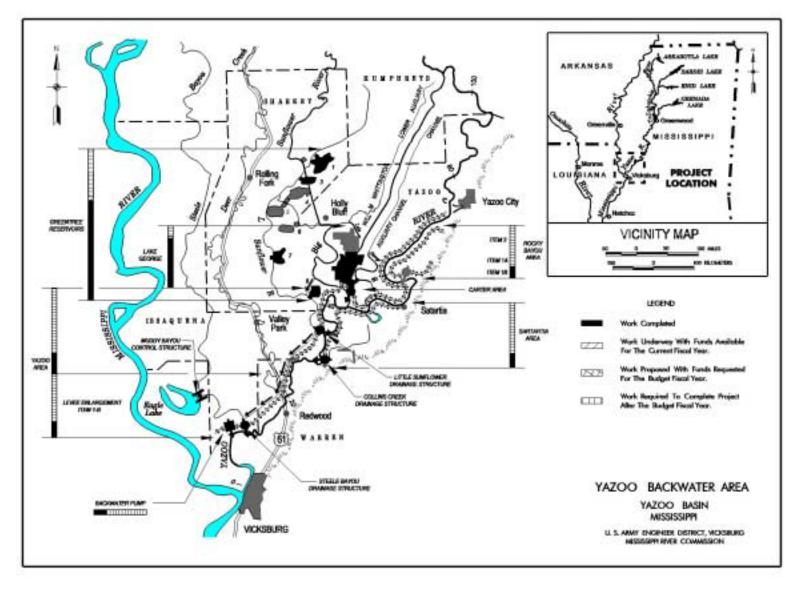
Mississippi River Commission Vicksburg District Yazoo Basin, Mississippi

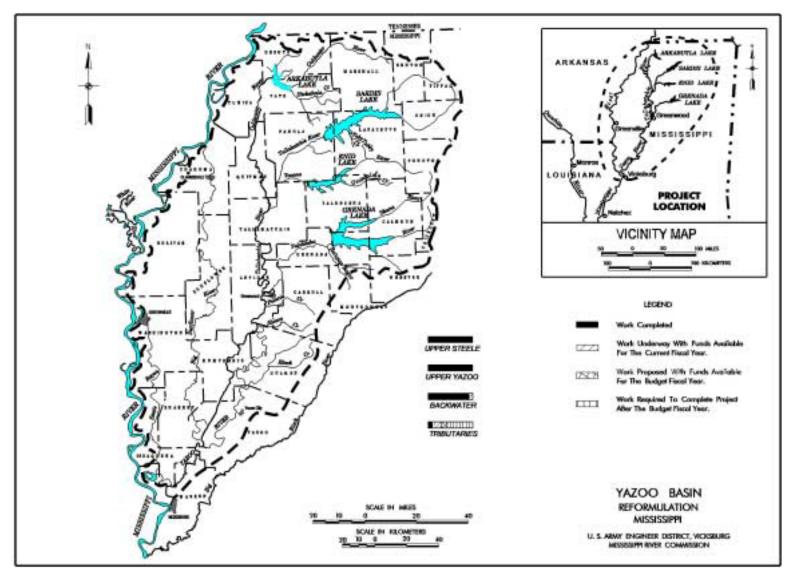






Mississippi River Commission Vicksburg District Yazoo Basin, Mississippi





APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Construction

PROJECT: St. John's Bayou – New Madrid Floodway, Missouri (Continuing)

LOCATION: The project area is located in southeast Missouri in New Madrid, Scott, and Mississippi Counties.

DESCRIPTION: The authorized project consists of 137 miles of rural channel improvement, 6.7 miles of urban channel improvement, a 1,000 cfs pumping station, and a 1,500 cfs pumping station, including mitigation features, and would be constructed in three phases. Work for the First Phase of the project is programmed. This phase includes the two pumping stations, 27.6 miles of channel improvements and appropriate mitigation features. The remaining St. John's Bayou work consists of 91 miles of channel improvements, including the 6.7 miles of urban channel. The remaining New Madrid floodway work consists of 25 miles of rural channel improvements. Both the St. Johns Bayou and New Madrid Floodway remaining work are unprogrammed due to the lack of local sponsor financing capability.

AUTHORIZATION: Water Resources Development Acts of 1986 and 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 1.4 to 1 at 7-3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 7-3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.2 at 7-3/8 percent

BASIS OF BENEFIT-COST RATIO: Benefits are from the March 1997 Limited Reevaluation Report at 1996 price levels based on total project. The benefit-cost ratio does not include costs associated with the 1,500-foot gap closure and box culvert authorized as a component of the Mississippi River Levee System by the Flood Control Act of 1954.

SUMMARIZED FINANCIAL DA	λΤΑ			STATUS (1 January 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Programmed Construction Unprogrammed Construction		\$42,800,000 21,800,000	\$64,600,000	First Phase St. Johns Phase New Madrid Phase Entire Project	3 0 0	September 2011 Indefinite Indefinite Indefinite
Estimated Non-Federal Cost Programmed Construction Cash Contributions Other Costs	\$ 6,200,000 7,300,000	\$13,500,000	\$43,500,000	PHYSICAL [ Lands and Damages: Flood Control F&WL Mitigation	DATA 6,467 acres 2,500 acres	
Estimated Non-Federal Cost Unprogrammed Construction Cash Contributions Other Costs	\$ 2,600,000 27,400,000	\$30,000,000		Restrictive Easements Seasonal Sump Pond Easements	2,450 acres 4,900 acres	

Mississippi River Commission

Memphis District

St. Johns Bayou – New Madrid Floodway, Missouri

4 February 2002

SUMMARIZED FINANCIAL DATA (cont.)		ACCUM PCT OF EST FED COST	PHYSICAL	DATA (cont.)
			Relocations: Roads Railroads	38 bridges/1 road 3 bridges
Total Estimated Programmed Construction Cost	\$ 56,300,000		Utilities	103 facilities
Total Estimated Unprogrammed Construction Cost	51,800,000		Channels:	4.40.0
Total Estimated Project Cost	108,100,000		Enlargement	143.6 miles
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002	\$ 8,985,000 1,000,000 150,000 <sup>1</sup>	4.4	Pumping Plants: 1000cfs 1500 cfs	
Allocations through FY 2002	9,135,000	14		
Allocation Requested for FY 2003 Programmed Balance to Complete After FY 2003 Unprogrammed Balance to Complete After 2003	\$ 100,000 33,565,000 21,800,000	14		

. . . . . . .

JUSTIFICATION: The project area is subject to flooding where the existing channels overflow. The lower end of the New Madrid Floodway is flooded by backwater from the Mississippi River. Construction of the authorized levee closure (Mississippi River Levee project item) in the lower end of the floodway would eliminate Mississippi River backwater; however, absent other features, local runoff would continue to build up behind the levee when the gate is closed during high Mississippi River stages. The project, therefore, includes two pumping stations and attendant channel improvements to help alleviate the flood problems. Total average annual benefits of the authorized project are as follows (1996 price levels):

Annual Benefits	Amount
Urban Agricultural Inundation Reduction Agricultural Intensification Advanced Replacements Betterments Wildlife and Aquatic Gains	\$ 2,491,000 6,277,000 2,363,000 232,000 13,000 159,000
Total	\$11,535,000

<sup>&</sup>lt;sup>1</sup> Reflects \$65,000 reduction assigned as savings and slippage; \$785,000 reprogrammed from the project. Mississippi River Commission

Memphis District

FISCAL YEAR 2003: The requested amount will be applied as follows:

Planning, Engineering and Design \$ 100,000

Total \$ 100,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, right-of-way, and borrow and excavated or dredged material disposal areas.	\$18,338,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	\$16,473,000	
Pay 5 percent of the costs allocated to flood control in cash to bring the total non-federal share of flood control cost to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	\$ 8,800,000	\$772,781
Total Non-Federal Costs	\$43,500,000	\$772,781

STATUS OF LOCAL COOPERATION: The St. John Levee and Drainage District is the cost-sharing local sponsor for the First Phase of the St. Johns Bayou and New Madrid Floodway Project. A Limited Reevaluation Report (LRR) to separate the engineering, economic, and environmental data for the First Phase from the overall project was approved 7 August 1997. The Project Cooperation Agreement was signed 18 August 1997 and the first item of construction was completed in October 1997. Subsequent work items as covered in the PCA are on hold pending NEPA compliance.

4 February 2002

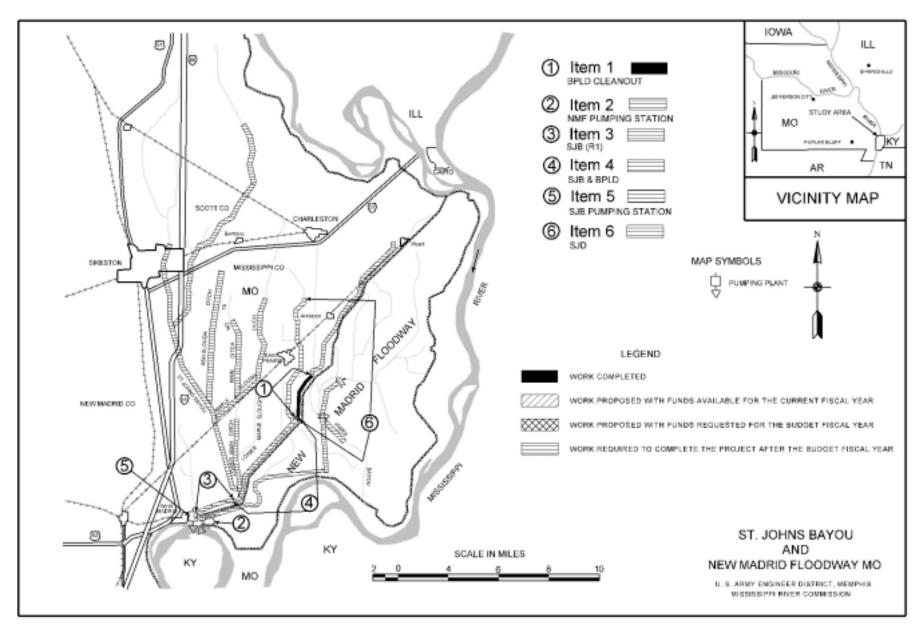
COMPARISION OF FEDERAL COST ESIMATES: The current Federal cost estimate of \$64,600,000 is an increase of \$3,200,000 from the latest estimate (\$61,400,000) presented to Congress (Fiscal Year 2002). This change includes the following:

Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments Price Escalation on Real Estate	\$3,197,000 -1,000 4,000
Total	\$3 200 000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Impact Statement (EIS) for the St. Johns Bayou and New Madrid Floodway project was filed with the Council on Environmental Quality in June 1974, and a Supplement to the EIS was filed with the U.S. Environmental Protection Agency (EPA) in July 1982. The EIS and Supplement to the EIS identified mitigation related to the fish, wildlife, and other environmental losses. Project changes resulting from Phase II General Design Memorandum (GDM) studies were evaluated in 1987. Environmental analysis conducted in conjunction with the preparation of the Phase II GDM reflected no substantive change in environmental impacts, and concluded that mitigation approved in prior reports would offset project losses. Project construction was initiated in FY 1997 with 4.3 miles of vegetative clearing along the Setback Levee Ditch. This work was covered by an Environmental Assessment/FONSI. A Supplemental EIS was developed, reviewed by the public, and filed with the EPA on 24 August 2000. Due to concerns by the EPA and Fish and Wildlife Service, ASA(CW) directed the Corps to revise the Supplemental EIS to include an analysis of additional closure locations for the Mississippi River Levees feature portion of the project and to provide additional clarification to the wetland analysis. A draft revised Supplemental EIS was filed with EPA on 2 November 2001 and distributed for public review. Responses for public comments are being prepared. The NEPA process is scheduled for completion in May 2002. Construction of remaining items can be initiated when NEPA processing is completed, water quality certification is received from the State of Missouri, and rights-of-way are provided by the local sponsor.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1982. Funds to initiate construction were appropriated in FY 1997. Local interests have expressed a desire to implement the First Phase portion of the St. Johns Bayou and New Madrid Floodway project to provide regional flood control and remove the physical and economic barriers caused by frequent flooding. East Prairie has received Federal recognition for its Enterprise Community Plan, thus making the Community eligible to receive Federal grant funds. USDA agreed to provide those funds necessary to reduce the local share of project costs to five percent.

4 February 2002



APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Horn Lake Creek and Tributaries, including Cow Pen Creek, Tennessee and Mississippi - (Continuing)

LOCATION: The project is located in Desoto County, MS, and adjoins the City of Memphis along its southern boundaries.

DESCRIPTION: The authorized constructed project consists of 3.5 miles of drift removal and 2.75 miles of vegetative clearing on Horn Lake Creek, 2.1 miles of vegetative clearing on Rocky Creek, and 0.62 miles of vegetative clearing and 1.85 miles of channel enlargement on Cow Pen Creek. Authorized, but unprogrammed work, includes hiking and biking trails adjacent to Rocky and Cow Pen Creeks. Local drainage is mainly provided by Horn Lake Creek for the basin. Section 541 of WRDA 2000 provided conditional authorization of modifications to the existing authorized project to provide urban flood protection along Horn Lake Creek, if the Secretary determines them to be feasible. A cost-sharing agreement was signed with the sponsor, the Horn Lake Creek Drainage District, on 5 October 2001. A reevaluation of the project is currently underway to determine if modifications to the project are feasible. The reevaluation study and fiscal closeout of the currently constructed project are the only work programmed for the project

AUTHORIZATION: Water Resources Development Act of 1986 and Section 541 of the Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because project construction is substantially complete. The benefits and cost of conditionally authorized modification will be determined.

TOTAL BENEFIT-COST RATIO: 3.6 to 1 at 6.375 percent

INITIAL BENEFIT-COST RATIO: 3.2 to 1 at 8-7/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1990 at 1988 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 January 2002)	PCT CMPL	COMPLETION SCHEDULE
Estimated Federal Cost Programmed Construction Unprogrammed Construction	\$ 3,850,000 20,000	\$ 3,870,000	Authorized Flood Control Recreation Reevaluation Study Entire Project	100 0 10 0	Sep 1999 Indefinite May 2004 Indefinite
Estimated Non-Federal Cost Programmed Construction Cash Contributions 605,000 Other Costs 2,110,000	\$ 2,715,000	\$ 2,735,000			

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### SUMMARIZED FINANCIAL DATA

Estimated Non-Federal Cost						PHYSICAL DATA
Unprogrammed Construction		\$ 20,000				
Cash Contributions	0					Authorized Flood Control:
Others Costs	20,000					Land and Damages, 105 acres
						Relocations
Total Estimated Programmed Cons	struction Cost		\$ 6,565,000			Roads, 4 bridges
Total Estimated Unprogrammed Co	onstruction Cost		40,000			Utilities, 11 facilities
Total Estimated Project Cost			6,605,000			Channels, 11 miles
						Recreation, hiking/biking trails,
Allocations to 30 September 2001			\$3,000,000			4.6miles
Conference Allowance for FY 2002	)		300,000			
Allocation for FY 2002			281,000	1		
Allocations through FY 2002			3,281,000		85	
Allocation Requested for FY 2003			300,000		93	
Programmed Balance to Complete	After FY 2003		269,000			
Unprogrammed Balance to Comple	ete After FY 2003		20,000			

JUSTIFICATION: The constructed authorized project reduces flooding to urban areas in Horn Lake and Southaven, Mississippi, as well as agricultural lands along Cow Pen Creek and Horn Lake Creek. The project provides a 25–year level of protection to existing residential development along Cow Pen Creek, but only a 1.1-year level of protection to existing developments along Horn Lake Creek and Rocky Creek. Average annual benefits for the authorized project are follows:

Annual Benefits	Amount
Flood Control Recreation	\$867,000 262,000
Total	\$1.129.000

In recent years, short duration heavy rains have resulted in flooding to structures and streets at numerous locations along Horn Lake Creek. Flooding, drainage, and erosion problems due to increased runoff are encroaching into existing developed areas and affecting planned development in communities throughout the area. Large areas of the City of Horn Lake are within the 100-year floodplain. Additional flood protection is needed along Horn Lake Creek.

Memphis District

Horn Lake Creek and Tributaries, Including Cow Pen Creek, Tennessee and Mississippi

4 February 2002

<sup>&</sup>lt;sup>1</sup> Reflects \$19,000 reduction assigned as savings and slippage. Mississippi River Commission

FISCAL YEAR 2003: The requested amount will be applied as follows:

Planning, Engineering and Design (Reevaluation)

\$ 300,000

Total

\$ 300,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Acts of 1986 and 1996, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and	Annual Operation, Maintenance, Repair, Rehabilitation and
Requirements of Local Cooperation	Reimbursements	Replacement Costs
Authorized Flood Control and Recreation:		
Provide lands, easements, rights-of-way, and dredged material disposal areas, which includes credit of \$240,000 allowed for Section 104 of WRDA of 1986.	\$1,799,000	
Modify or relocate building, utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project.	97,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.	20,000	\$ 300
Pay not less than 5 percent of the cost allocated to flood control to bring the total non-Federal share of the flood control costs to 25 percent; and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	310,000	17,700
Other (Channels and Canals)	214,000	
Total Non-Federal Costs	\$2,440,000	\$18,000

Mississippi River Commission

Memphis District

4 February 2002

Horn Lake Creek and Tributaries, Including Cow Pen Creek, Tennessee and Mississippi 382

Annual
Operation,
Maintenance

Maintenance, Repair,

Payments Repair, During Rehabilitation

Construction and and

Reimbursements Replacement Costs

Requirements of Local Cooperation

Reevaluation:

Pay upfront 25 percent of costs associated with the reevaluation, to be adjusted to project cost sharing during construction.

\$295,000

Total Non-Federal Costs \$295,000

### STATUS OF LOCAL COOPERATION

Authorized Flood Control and Recreation:

The Horn Lake Creek Watershed Drainage District is the local sponsor of the project. The Local Cooperation Agreement for the flood control portion of the project was executed on 26 February 1992. The recreational component is unprogrammed.

### Reevaluation:

The study sponsors, Horn Lake Creek Watershed Drainage District and the Cities of Southaven and Horn Lake, Mississippi, approved the Project Management Plan on 20 September 2001. The cost sharing agreement to conduct the reevaluation study was executed on 5 October 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$3,870,000 is an increase of \$1,470,000 over latest estimate \$2,400,000 presented to Congress (FY 1996). The change includes the following items:

ItemAmountAuthorized modifications<br/>Post Contract Award and Other Estimating Adjustments\$885,000Total\$1,470,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 22 July 1982 and an Environmental Assessment was completed with a finding of no significant impact during preparation of the December 1988 General Design Memorandum for the currently authorized project. Any additional NEPA requirements for modifications to the project will be prepared developed during the reevaluation.

Mississippi River Commission

Memphis District

Horn Lake Creek and Tributaries, Including Cow Pen Creek, Tennessee and Mississippi

4 February 2002

OTHER INFORMATION: Funds to initiate construction of the currently authorized project were appropriated in Fiscal Year 1991. The reevaluation study is scheduled for completion in May 2004.

Horn Lake Creek Element

SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost \$ 2,985,000

Programmed Construction \$2,965,000 Unprogrammed Construction 20,000

Estimated Non-Federal Cost \$ 2,440,000

Programmed Construction \$2,420,000

Cash Contributions 310,000 Others Costs 2,110,000

**Estimated Non-Federal Cost** 

Unprogrammed Construction \$ 20,000

Cash Contributions 0 Others Costs 20,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because project construction is substantially complete.

TOTAL BENEFIT-COST RATIO: 3.6 to 1 at 6.375 percent

Horn Lake Creek Modification Element:

SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost \$ 885,000 Estimated Non-Federal Cost 295,000

> Cash Contributions 295,000 Others Costs 0

Total Estimated Project Cost \$1,180,000

REMAINING BENEFIT-REMAINING COST RATIO: To be determined.

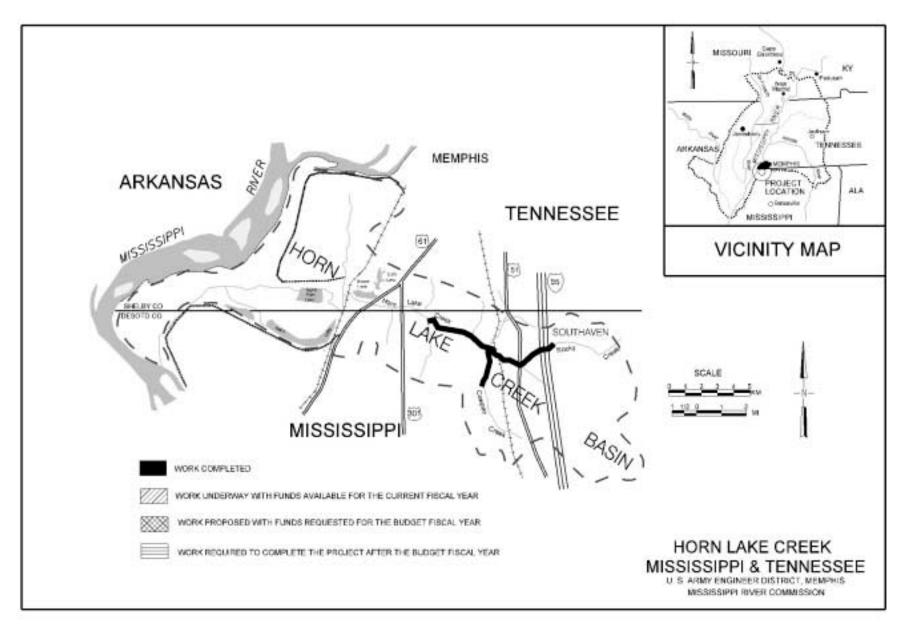
TOTAL BENEFIT-COST RATIO: To be determined.

Mississippi River Commission

Memphis District

Horn Lake Creek and Tributaries, Including Cow Pen Creek, Tennessee and Mississippi

4 February 2002



APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Nonconnah Creek, Tennessee and Mississippi (Continuing)

LOCATION: The Nonconnah Creek Basin is located in portions of Shelby and Fayette Counties in southwest Tennessee and extends into DeSoto and Marshall Counties in northwest Mississippi. Approximately half of the City of Memphis, Tennessee, is located within the drainage area.

DESCRIPTION: There are five elements to this project. The Flood Control Element consists of 7.7 miles of channel enlargement and 10.5 miles of channel clearing. The Environmental Element consists of 0.8 mile of nature trails and a 33-acre nature area. The Recreational Element consists of 8.8 miles of hiking/biking trails. The Flood Control Extension will extend the area protected by the flood control element upstream approximately 5 miles to Reynolds Road. The Recreation Extension would extend this element from 8.8 miles to 27 miles of hiking/biking trails. Both the extension elements are authorized if the Secretary determines that they are technically sound, environmentally acceptable, and economically justified. A reevaluation of these extensions is being performed to determine their feasibility.

AUTHORIZATION: Section 401 of the Water Resources Development Act of 1986 and Section 541 of the Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 7.5 to 1 at 8-7/8 percent (Flood Control Element only).

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 8-7/8 percent

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 8-7/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1990 at 1988 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 January 2002)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Programmed Construction Unprogrammed Construction	\$18,521,000 454,000	\$18,975,000	Flood Control Element Environmental Element Recreation Element Flood Control Extension	70 0 0 0	Sep 2004 Indefinite Indefinite Sep 2003
Estimated Non-Federal Cost Programmed Construction Cash Contributions \$ 1,325,000 Other Costs 4,986,000	\$6,311,000	\$ 6,725,000	Recreation Extension Entire Project	0 65	Sep 2003 Indefinite
Estimated Non-Federal Cost Unprogrammed Construction Cash contributions \$ 0 Other Costs 414,000	\$ 414,000				

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### SUMMARIZED FINANCIAL DATA (CONT)

Total Estimated Programmed Construction Cost Total Estimated Unprogrammed Construction Cost	\$24, 832,000 868,000		PHYSICAL DATA
Total Estimated Project Cost	25,700,000		Lands and Damages:
Total Estimated Froject Sost	20,700,000		Flood Control, 600 acres
Allocations to 30 September 2001	\$14,609,000		F&WL Enhancement, 33 acres
Conference Allowance for FY 2002	1,615,000		Relocations:
Allocation for FY 2002	1,510,000 <sup>1</sup>		Roads, 1 bridge
Allocations through FY 2002	16,119,000	85	Utilities, 36 facilities
Allocation Requested for FY 2003	605,000	88	Channels:
Programmed Balance to Complete After FY 2003	1,797,000		Enlargement, 7.7 miles
Unprogrammed Balance to Complete After FY 2003	454,000		Vegetation Clearing, 15.5 miles
·			Recreation:
			Bike/Hike Trails, 27 miles
			Nature Trails, 0.8 miles

JUSTIFICATION: Flood protection is needed for 7,400 homes, businesses, and public buildings on 12,000 acres of urban and urbanizing lands located within the Nonconnah Creek flood plain inundated by the Standard Project Flood. The present value of these properties subject to flood damage is equal to \$1,826,525 (2001 price levels). Major floods occurred in the basin on 21 November 1934, when 10.48 inches of rain fell in 24 hours, and on 9 May 1958, when 4.76 inches of rain fell in approximately eight hours. The most recent significant flood occurred on 3 December 1978, when 4.9 inches were recorded at the Memphis International Airport. The 1978 storm appears to be between the 5-year and 10-year frequency events. Under present day conditions, the 1934 and 1958 flood levels would cause considerably higher damages due to increased urbanization. When completed, the Nonconnah Creek project will prevent approximately \$515,429,000 (2001 price levels) in flood damages during the Standard Project Flood. Feasibility level investigations being conducted indicate that a flood control element is feasible for the extension. Remaining average annual benefits (1987 price levels) are as follows:

Annual Benefits	Amount		
Flood Damage Prevention Other Flood Control Benefits Extensions	\$ 1,923,000 203,000 To be determined		
Total	\$ 2,126,000		

<sup>&</sup>lt;sup>1</sup> Reflects \$105,000 reduction assigned as savings and slippage. Mississippi River Commission

# FISCAL YEAR 2003: The requested amount will be applied as follows:

## Continue:

Lands and Damages for Flood Control Element	\$ 10,000
Planning, Engineering and Design for Flood Control	50,000
Planning, Engineering and Design for Extensions	145,000
Supervision and Administration for Flood Control	63,000
`	

Complete:

Item 2, Phase 1, Channel Improvement 337,000

Total \$605,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Acts of 1986 and 1996, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Flood Control Element Provide lands, easements, rights-of-way, and dredged material disposal areas	\$2,113,000	
Modify or relocate buildings utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project	2,887,000	
Pay not less than 5 percent of the cost allocated to flood control to bring the total non-Federal share to 25 percent; and bear all costs of operation, maintenance repair, rehabilitation, and replacement of flood control facilities.	322,000	\$ 17,600
Environmental Element Provide lands, easements, rights-of-way, and dredged material disposal areas	50,000	

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Recreation Element Provide lands, easements, rights-of-way, and dredged material disposal areas Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, rehabilitation and replacement of recreation facilities.	28,000 1,200,000	13,800
Flood Control and Recreation Extensions Pay 25 percent of costs associated with the reevaluation, to be adjusted to project cost-sharing during Construction.	125,000	
Total Non-Federal Costs	\$6.725.000	\$31.400

STATUS OF LOCAL COOPERATION: The Local Cooperation Agreement for the flood control feature was executed on 23 July 1990, with the City of Memphis, Tennessee, serving as the local sponsor. The sponsor has reviewed a draft amendment to the cost-sharing agreement to include the added recreation and environmental enhancement features and the local sponsor is ready to execute an agreement. The sponsor has provided letters stating financial and legal capabilities to sponsor these features, which are currently unprogrammed. The sponsor has also agreed to make all required payments concurrently with project construction. The cost-sharing agreement to perform the reevaluation of the flood control and the recreation extensions was signed on 16 January 2002 with officials from Shelby County, Tennessee, the local sponsors for the extensions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$18,975,000 is an increase of \$575,000 from the latest estimate (\$18,400,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features Post Cont4ract Award and Other Estimating Adjustments Price Escalation on Real Estate Authorized Modifications	\$ 133,000 59,000 8,000 375,000
Total	\$ 575.000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final supplemental environmental impact statement was filed with the Environmental Protection Agency on 22 July 1982. Environmental assessments were made during Phase II General Design Memorandum studies, and changes were not of significant magnitude to warrant modifying the project impact statement.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986, and funds to initiate construction were appropriated in FY 1990. The reevaluation of the flood control and recreation extensions is scheduled for completion in September 2003.

### Flood Control Element

### SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost \$ 18,083,000 Estimated Non-Federal Cost 6,186,000

Cash Contributions \$ 1,200,000 Others Costs \$ 4,986,000

Total Estimated Project Cost \$24,269,000

REMAINING BENEFIT-REMAINING COST RATIO: 7.5 to 1 at 8-7/8 percent

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 8-7/8 percent

**Environmental Element (Unprogrammed)** 

### SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost \$ 156,000 Estimated Non-Federal Cost 53,000

Cash Contributions \$ 0

Others Costs 53,000

Total Estimated Project Cost \$ 209,000

Recreation Element (Unprogrammed)

### SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost \$ 361,000 Estimated Non-Federal Cost \$ 361,000

Cash Contributions \$ 0 Others Costs \$ 361,000

Total Estimated Project Cost \$ 722,000

Mississippi River Commission

Memphis District 4 February 2002

Nonconnah Creek, Tennessee and Mississippi

Flood Control and Recreation Extensions (Reevaluation Only, Programmed)

## SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost \$ 375,000 Estimated Non-Federal Cost \$ 125,000

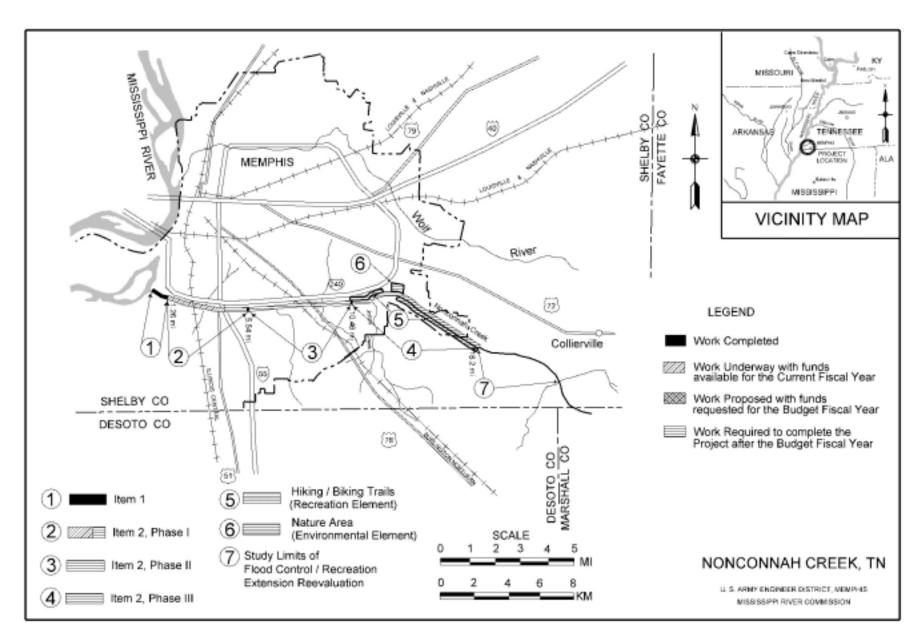
Cash Contributions \$ 125,000

Others Costs (

Total Estimated Project Cost \$ 500,000

REMAINING BENEFIT-REMAINING COST RATIO: To be determined

TOTAL BENEFIT-COST RATIO: To be determined



APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: West Tennessee Tributaries, Tennessee (Continuing)

LOCATION: The project is located along the Obion and Forked Deer Rivers and their forks in West Tennessee, in Weakley, Madison, Gibson, Obion, Dyer, Crockett, Lauderdale and Haywood Counties, Tennessee.

DESCRIPTION: The project consists of improving 119 miles of channels of the Obion River and its principle tributaries, the North, South, Middle and Rutherford Fork; and improving 106 miles of channels of the Forked Deer and its North, South, and Middle Forks to provide adequate drainage outlets and reduce the frequency, depth, and duration of overflow. The work consists of clearing, cleanout, enlargement, and realignment of channels and construction of 7.6 miles of levee from Porter Gap to Island 25 on the Obion River. The project also includes the acquisition of 32,000 acres of fish and wildlife mitigation lands. Approximately 93 miles of channel improvement have been completed and 13,527 acres of land have been purchased for mitigation. Construction on the remaining channel items of the authorized project is not currently implementable due to the denial of water quality certification by the State of Tennessee. Consequently, the project is being shut down. Shutdown work includes project management and project planning; continued coordination with the State of Tennessee on any problems that may arise during the shutdown process; real estate and environmental activities required in the turnover of the acquired mitigation lands to the State of Tennessee; stability analyses to determine required protection work for bridge and utility crossings in the uncompleted portions of the project; preparation of plans and specifications for the required protection work; and construction of the protection work. In 1992, the State of Tennessee requested that the West Tennessee Tributaries project be reactivated by incorporating environmentally sensitive guidelines into its design. The state subsequently set up a steering committee composed of representatives from state and Federal agencies and local interest groups. The objective of the steering committee was to develop a consensus plan for reformulation of the project. A consensus plan, known as the Mission Plan, was completed in April 1994. A limited evaluation of the Stokes Creek and the Middle Fork Forked Deer River, including Buck Creek, Demonstration Projects, included in the Mission Plan has been completed. The demonstration projects were found to be feasible and were approved in September 1996 as minor modifications to the authorized project. Approval was also given to reformulate the remaining project in accord with the mission plan principles. Only shutdown work, the demonstration projects, and reevaluation activities are programmed. All work on the demonstration projects and the reformulation has been deferred until implementation issues regarding mitigation acquisition can be resolved.

AUTHORIZATION: Flood Control Acts of 1948 and 1966 and the Water Resources Development Acts of 1974 and 1976.

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 2-1/2 percent.

TOTAL BENEFIT-COST RATIO: 10.3 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: 2.6 to 1 at 2 at 2-1/2 percent (FY 1960).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in August 1983 at 1983 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 January 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Programmed Construction \$84,900,000 Unprogrammed Construction 71,800,000	\$156,700,000		Project Shutdown Current Approved Plan	90 45	Indefinite Indefinite
Estimated Non-Federal Cost Programmed Construction \$ 1,900,000 Cash Contributions \$ 0	\$ 5,200,000		Entire Project PHYSI	41 CAL DATA	Indefinite
Other Costs 1,900,000			Lands and Damages: Relocations		) acres
Estimated Non-Federal Cost Unprogrammed Construction \$ 3,300,000 Cash Contributions \$ 0 Other Costs 3,300,000			Roads Railroads Channels: Obion River Obion River Forks	13 bric 7 bric 56 mi 65 mi	dges les
Total Estimated Programmed Construction Cost Total Estimated Unprogrammed Construction Cost Total Estimated Project Cost	\$ 86,800,000 75,100,000 161,900,000		Forked Deer River Forked Deer River For Total Levees and Floodwalls	5 mi	les iles iles
Allocations to 30 September 2001 Conference Allowance for FY 2002 Allocation for FY 2002 Allocations through FY 2002	\$ 54,184,000 25,000 23,000 <sup>1</sup> 54,207,000	35			
Allocation Requested for FY 2003 Programmed Balance to Complete after FY 2003 Unprogrammed Balance to Complete after FY 2003	\$ 100,000 30,593,000 71,800,000	35			

<sup>&</sup>lt;sup>1</sup> Reflects \$2,000 reduction assigned as savings and slippage. Mississippi River Commission

JUSTIFICATION: The project is a flood control and drainage project and is a unit of the Comprehensive Plan for Flood Control, Mississippi River and Tributaries. The floods of record in 1935 and 1937 inundated 455,000 acres of cleared and wooded area. This entire area will receive benefits from project construction due to improved flood control, drainage, and environmental restoration. Project construction will also eliminate flooding during the crop season on about 239,221 acres (162,644 cleared and 76,577 wooded). The principle population centers of the drainage basin include Jackson, Dyersburg, Union City, Humboldt, Trenton, and Milan, all in Tennessee, and Fulton, Kentucky. Farming, including truck farming, stock raising and dairying, is the principal occupation throughout the basin. Construction of the project will tend to stabilize the area's predominately agricultural economy. The project is credited with redevelopment benefits, benefits from flood damages prevented and benefits from a higher land use made possible by reducing flooding. Haywood and Lauderdale Counties within the project area are subject to substantial and persistent unemployment. Total average annual benefits (1983 price levels) are as follows:

Annual Benefits	Amount
Flood Control	\$ 2,007,000
Area Redevelopment	23,000
Advance Replacement	30,000
Betterments	8,000
Fish and Wildlife Oriented Recreation	1,164,000
Timber	605,000
Stokes Creek	44,000
Total	¢ 2 004 000
Total	\$ 3,881,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Planning, Engineering and Design	\$ 100,000
Total	\$ 100,000

NON-FEDERAL COST: In accordance with the Flood Control Acts of 1948 and 1966 and the Water Resources Development Acts of 1974 and 1976, the non-Federal sponsor must comply with the requirements listed below:

Annual Operation, Maintenance,

Payments During

Repair, Rehabilitation

Construction and Reimbursements

and

Provide lands, easements, rights-of-way, and dredged material disposal areas.

\$4,953,000

Replacement Costs

Modify or relocate roads not crossing the project channels where necessary for the construction of the project.

\$ 247,000

Pay all costs of operation, maintenance, and replacement of flood control facilities.

\$ 536,000

**Total Non-Federal Costs** 

Requirements of Local Cooperation

\$5,200,000

\$ 536,000

STATUS OF LOCAL COOPERATION: Necessary assurances were furnished by the Obion-Forked Deer Basin Authority on 2 June 1972 and were accepted on 14 June 1972. Section 221 of the Flood Control Act of 1970 (PL 91-611) is not applicable to other items of work but is required by Section 3 of the Water Resources Development Act of 1974 (PL 93-251) for the mitigation lands and for the levees authorized by the Water Resources Development Act of 1976 (PL 94-587). Assurances have not been furnished for the levees.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$156,700,000 is an increase of \$3,400,000 from the latest estimate (\$153,300,000) presented to Congress (FY 2002). This change includes the following:

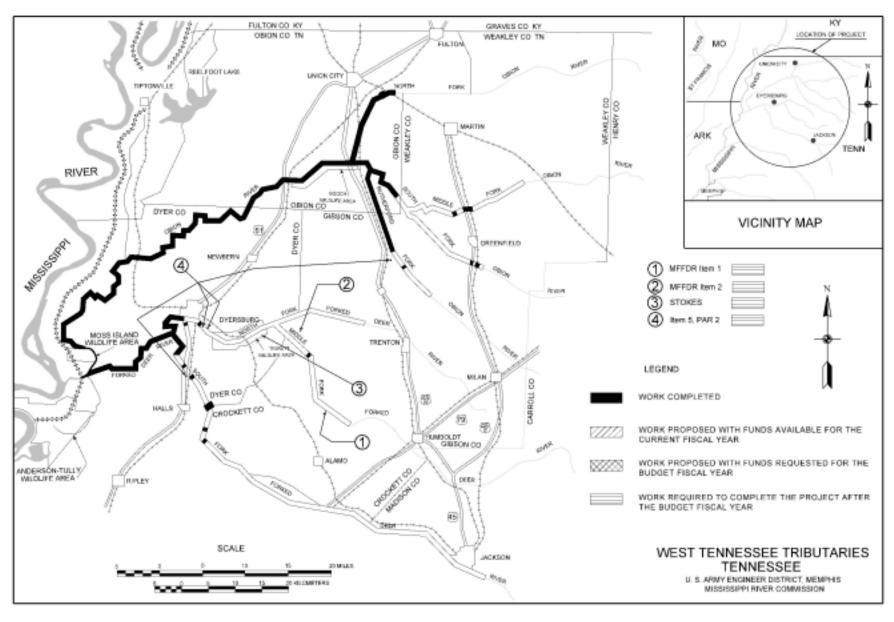
Item	Amount
Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments Price Escalation on Real Estate	\$2,581,000 5,000 814,000
Total	\$3,400,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A fully coordinated Environmental Impact Statement (EIS) in final form was forwarded to the Council on Environmental Quality on 4 May 1971. Court action on 2 March 1973 rejected the EIS, directed revision of the EIS, and stated that the revised EIS was subject to District Court review. A final Environmental Impact Statement was submitted to the Council on Environmental Quality on 21 July 1975 and published in the Federal Register on 1 August 1975. The EIS was determined inadequate, and the injunction was continued by court decision dated 27 January 1978. A supplement to the EIS has been prepared to eliminate the deficiencies identified in the Memorandum Decision of 27 January 1978. The draft supplement to the EIS was provided to the public for review and to the Environmental Protection Agency for filing and review on 29 April 1982. The final supplement to the EIS was forwarded to the Environmental Protection Agency on 9 February 1983. The notice appeared in the Federal Register on 25 February 1983. The Record of Decision was signed by President, Mississippi River Commission on 8 August 1983.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1959 and for construction in Fiscal Year 1960.

In 1973, as a result of a lawsuit, the District court found the Environmental Impact Statement to be inadequate, and enjoined any further construction. The injunction was lifted in 1985. Another suit was filed that same year, which challenged the Environmental Impact Statement. The District Court denied the request for a temporary restraining order and preliminary injunction. The Corps filed a Motion to dismiss the case which was granted by the Court. A Notice of Appeal was filed by the Plaintiff in 1986, but the U.S. Sixth Circuit Court of Appeals dismissed the appeal as an impermissible collateral attack. Chester McConnell and Tennessee Environmental Council filed in Chancery Court of Davidson County an appeal and request for judicial review of Water Quality Control Board's final decision and order on Fowlkes Items 1-1 and 1-2 dated 8 May 1986. The Chancery Court affirmed the Board's decision and final order in 1987. Petitioners appealed and the case was remanded to the Tennessee Water Quality Control Board for further findings of facts and conclusions of law in relation to the issue of "issuance of permits for projects involving a portion of the subject river without considering the effect of such projects and/or any other contemplated projects upon the entire river." Finding of Facts and Conclusions of Law were issued by the Board after affirming their previous decision. Water quality certification for the next planned construction item, Sidonia, was denied by the Tennessee Department of Health and Environment. The Corps appealed this decision, but after numerous meetings and discussions with the State in an attempt to arrive at a mutually agreeable plan of improvement for the Sidonia item, and with no apparent resolution forthcoming, the Corps withdrew the appeal in May 1989. The Corps will not proceed with further construction or acquisition of related mitigation lands for the authorized project until the State of Tennessee provides water quality certification and necessary rights-of-way for construction

397



Mississippi River Commission

Memphis District

West Tennessee Tributaries, Tennessee

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN, Maintenance, FY 2003

The request of \$162,135,000 provides for the day-to-day operation and ordinary maintenance, repair, and dredging activities in the Mississippi River and Tributaries Program. It also consists of the revision and publication of alluvial valley maps and navigation charts. The fund requirements are based upon the normal recurring annual expenses determined from experience records during the past years, and the repair and dredging work necessary to maintain the projects in operable condition.

	ESTIMATED C	BLIGATIONS	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Facility Protection, AR, MO, LA, MS	0	1,000,000	
	(0)	(1,000,000)	Variation of facility protection at various locations within MVD.
	(0)	(0)	2. None.
Mississippi River	7,771,000	7,185,000	
Levees, AR, IL, KY, LA	(1,630,000)	(1,680,000)	1. None.
MS, MO, & TN	(6,141,000)	(5,505,000)	Repair levee slides at various locations.
Mo, Mo, a m	(0,141,000)	(0,000,000)	2. Repair levee shads at various locations.
Bonnet Carre, LA	2,669,000	3,105,000	
	(1,281,000)	(1,473,000)	Variation in Recreation Management activities.
	(1,388,000)	(1,632,000)	2. Raise spillway guide levee.
Mississippi Delta Region	882,000	860,000	
Caernarvon, LA	(882,000)	(860,000)	1. None.
	(0)	(0)	2. None.
Revetments and Dikes	41,251,000	48,465,000	
Nevelinents and Dikes	(1,760,000)	(1,775,000)	1. None.
	(39,491,000)	(46,690,000)	Variation in repairs to revetments and dikes.
	(39,491,000)	(40,090,000)	2. Valiation in repairs to reveilments and dikes.
Dredging	15,258,000	18,000,000	
	(3,568,000)	(3,640,000)	1. None.
	(11,690,000)	(14,360,000)	2. Dredging.
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-	ESTIMATED C	<u>DBLIGATIONS</u>	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
<u>Project Name</u>	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Memphis Harbor	1,045,000	1,750,000	
(McKellar Lake), TN	(85,000)	( 85,000)	1. None.
	(960,000)	(1,665,000)	2. Dredging.
Greenville Harbor, MS	610,000	340,000	
	(19,000)	(20,000)	1. None.
	(591,000)	(320,000)	2. None.
Helena Harbor, AR	406,000	490,000	
	(38,000)	(42,000)	Variation in survey requirements.
	(368,000)	(448,000)	2. None.
Vicksburg Harbor, MS	462,000	330,000	
	(23,000)	(25,000)	1. None.
	(439,000)	(305,000)	2. None.
Baton Rouge Harbor	205,000	210,000	
(Devil's Swamp), LA	(11,000)	(12,000)	1. None.
	(194,000)	(198,000)	2. None.
Mapping	1,038,000	1,170,000	
Arkansas	(282,000)	(320,000)	1. None.
Illinois	(8,000)	(9,000)	1. None.
Kentucky	(21,000)	(23,000)	1. None.
Louisiana Missouri	(435,000) (35,000)	(478,000) (42,000)	<ol> <li>None.</li> <li>None.</li> </ol>
Mississippi	(35,000)	(238,000)	1. None.
Tennessee	(49,000)	(60,000)	1. None.
1011100000	(40,000)	(55,566)	1. 110110.

STATE	ESTIMATED C		Reason for Change and Major Maintenance Items  1. Reasons for Change in Operations from EV 2002 and EV 2002
<u>STATE</u>	<u>FY 2002 (\$)</u> Total	<u>FY 2003 (\$)</u> Total	1. Reasons for Change in Operations from FY 2002 and FY 2003 (10%+/).
Project Name	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
St. Francis Basin, AR & MO	7,973,000	6,730,000	
Wappapello Lake, MO	(3,219,000)	(3,540,000)	Variation in operational labor costs.
	(4,754,000)	(3,190,000)	Relocate State and County Roads.
St. Francis River &			
Tributaries, AR & MO	11,247,000	10,580,000	
ŕ	(3,394,000)	(3,499,000)	Variation in pumping requirements.
	(7,853,000)	(7,081,000)	2. Cleanout Lower Buffalo, Belle Fountain West and State Line
			Outlet, AR.
White River	1,066,000	1,250,000	
Backwater, AR	(727,000)	(905,000)	Variation in pumping requirements.
	(339,000)	(345,000)	2. None.
Lower Arkansas River, AR	393,000	105,000	
North Bank	(15,000)	(0)	1. Variation in survey requirements.
	(378,000)	(105,000)	2. None.
South Bank	9,000	135,000	
South Bank	(9,000)	(30,000)	Variation in survey requirements.
	(0)	(105,000)	2. None.
	, ,		2. 16.16.
Tensas Basin, AR & LA	3,041,000	2,463,000	
Boeuf and Tensas Rivers	(2,341,000)	(2,463,000)	1. None.
	(700,000)	(0)	2. None.
Red River Backwater	2,341,000	3,145,000	
	(2,338,000)	(3,143,000)	Variation in operation costs.
	(3,000)	(2,000)	2. None.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN, Maintenance, FY 2003

	ESTIMATED (	<u>DBLIGATIONS</u>	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
B	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Yazoo Basin, MS			
Sardis Lake	9,787,000	5,905,000	
	(4,644,000)	(5,888,000)	Increased contract cost for operations.
	(5,143,000)	(17,000)	2. None.
Arkabutla Lake	6,548,000	5,380,000	
	(3,920,000)	(5,373,000)	Increased contract cost for operations.
	(2,628,000)	(7,000)	2. None.
Enid Lake	4,677,000	4,920,000	
Elliu Lake	(3,500,000)	(4,795,000)	Increased contract cost for operations.
	(3,300,000)	(4,795,000)	2. None.
	(1,177,000)	(123,000)	Z. NOTE.
Grenada Lake	5,154,000	5,700,000	
	(4,500,000)	(5,655,000)	Increased contract cost for operations.
	(654,000)	(45,000)	2. None.
Greenwood	494,000	825,000	
	(494,000)	(825,000)	Variation in pumping plant operations.
	(0)	(0)	2. None.
Yazoo City	446,000	805,000	
1 d200 Oily	(446,000)	(805,000)	Variation in pumping plant operations.
	(0)	(0)	2. None.
	(3)	(0)	
Main Stem	732,000	1,265,000	
	(732,000)	(1,258,000)	Increased operational costs.
	(0)	(7,000)	2. None.
	. ,	. ,	

4 February 2002

	ESTIMATED C	<u>DBLIGATIONS</u>	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
D : 4N	Total	Total	(10%+/).
<u>Project Name</u>	(Operations)	(Operations)	2. Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Tributaries	1,119,000	1,265,000	
	(1,119,000)	(1,260,000)	1. Variation in operations activities.
	(0)	(5,000)	2. None.
	( )	( , ,	
Will M. Whittington	241,000	450,000	
Auxiliary Channel	(241,000)	(448,000)	Variation in operations activities.
	(0)	(2,000)	2. None.
Big Sunflower	3,014,000	115,000	
Dig Carmower	(109,000)	(115,000)	1. None.
	(2,905,000)	(0)	2. None.
	<i>( ' ' ' '</i>	( )	
Yazoo Backwater	393,000	280,000	
	(393,000)	(280,000)	Reduced operations activities.
	(0)	(0)	2. None.
Old River, LA	5,814,000	11,520,000	
3.d 1 (1731, 271	(3,857,000)	(3,950,000)	1. None.
	(1,957,000)	(7,570,000)	2. Old River Lock. Fabricate miter gates and sandblast and paint
	,	, ,	two miter gates.
At the falls of Device LA	40.054.000	40.540.000	
Atchafalaya Basin, LA	10,951,000	12,512,000	4. Variation in apparations activities
	(5,230,000)	(5,811,000)	Variation in operations activities.     Dradging
	(5,721,000)	(6,701,000)	2. Dredging.
Lower Red River, LA	4,001,000	125,000	
	(59,000)	(63,000)	Scheduled periodic inspections.
	(3,944,000)	(62,000)	2. None.

	ESTIMATED C	BLIGATIONS	Reason for Change and Major Maintenance Items
<u>STATE</u>	FY 2002 (\$)	FY 2003 (\$)	1. Reasons for Change in Operations from FY 2002 and FY 2003
	Total	Total	(10%+/).
Project Name	(Operations)	(Operations)	Major Maintenance Items Budgeted in FY 2003
	(Maintenance)	(Maintenance)	(Threshold \$500,000)
Bayou Cocodrie &	53,000	75,000	
Tributaries, LA	(53,000)	(75,000)	1. Variation in operations activities.
Tributaries, LA	· ·	(0)	2. None.
	(0)	(0)	Z. NOHE.
Atchafalaya Basin	1,962,000	2,095,000	
Floodway System, LA	(653,000)	(1,611,000)	Variation in operations activities.
	(1,309,000)	(484,000)	2. None.
Inspection of	1,362,000	1,585,000	
Completed Works	, ,	, ,	
Arkansas	(397,000)	(441,000)	1. None.
Illinois	(44,000)	(50,000)	1. None.
Kentucky	(31,000)	(35,000)	1. None.
Louisiana	(399,000)	(510,000)	1. None.
Missouri	(147,000)	(167,000)	1. None.
Mississippi	(257,000)	(286,000)	1. None.
Tennessee	(87,000)	( 96,000)	1. None.
TOTAL	154,415,000	162,135,000	
	(53,688,000)	(65,159,000)	
	(100,727,000)	(96,976,000)	